

THE
Ethical Problem in Ancient
Times


Librarian

Uttarpara Joykrishna Public Library
Govt. of West Bengal



THE ETHICAL PROBLEM IN ANCIENT TIMES

THE history of ethics has, apart from the light which it throws on philosophy in general, an interest peculiar to itself. For, whilst metaphysical theories are often the work of men not in close contact with practical life, the ethical theories of a philosopher, on the contrary, give nearly always an ideal interpretation of the customs and moral sentiments of his age.

Moralists are in a sense the legislators of nations, for they in truth dictate laws to the nobler minds, whose ideal of conduct is not bounded by the narrow limits of mere legality. Ethical systems, no less than legal codes, have for their foundations, as Plato says, not "rocks and oaks, but the customs of the state" (*Rep.* Book VIII, Chapter II); and far more clearly than philosophy or science, they reveal to us the character and spirit of the nations to which they belong. The history of human societies explains, and is in its turn explained by the history of ethics.

Practical morality which is too often ignored in the exposition of moral systems, as if it were subordinate and a matter of detail, really possesses the same historical interest as theoretical ethics. It is in a way even more instructive, for it enables us to penetrate more deeply into the life and thought of past centuries. Practice has often been not only the starting point, but perhaps also the determining cause of moral theory. Logic comes later to the support of morality and only to justify, by means of reasoning, ideas which were originally simple intuitions. Moral truths gain cogency when they are presented in the form of deductions, and so afford each other

mutual support. Hence moral teachers, who are in any case anxious to prove that their precepts are based on the authority of reason, have grouped their ideas systematically, thereby gratifying the human mind in its love of order.

If the doctrines of philosophers thus express in the most perfect form the moral conceptions of a people, they may be taken at the same time as the measure of the progress made by the human conscience in the different ages. Thus, in addition to their purely historical interest, these ethical doctrines have a speculative interest of the highest order, for they prove that conscience itself obeys the law of evolution.

Nevertheless, we must not fall into the common error of believing that even those theoretical speculations, which to the intelligence have been most convincing, have changed the customary morality of a people. For men's hearts are not transformed by speculative doctrines, not even by those that bring most conviction to their minds. If conscience changes it is only by a slow and gradual progress. Nor is this progress uniform and continuous. The deviations in its course give evidence of the diversity of the minds in which, at different times and in many different ways, it has been actualized.

Ethical Notions of Pre-philosophic times.

Ethical thought began to manifest itself at the earliest period of the existence of human societies, and found expression both in the works of law-givers and of poets. Arising out of reflections which not only great events but also the ordinary accidents of life must suggest to all men, moral science took at first the form of an entirely practical teaching. In Greece its first expositors were: Homer, in whose pictures of real life Horace professes to find a lofty morality (*Epistles*, 1, 2), Hesiod (*Works and Days*), the gnomic poets, Solon, Theognis, and the seven sages whose very names are uncertain.

Ethics in Homer appears as the courage and tenderness of Achilles, the perseverance of Ulysses, the fidelity of Penelope, the punishment of Paris in the *Iliad*, and of the suitors in the *Odyssey*. With Hesiod moral reflection proper begins to appear, but it is still feeble, and only shows

itself in connection with the poet's individual experiences. He was thinking of his quarrels with his brother when he wrote, "there are two kinds of contests, one is odious and reprehensible, for example lawsuits and trials, the other is noble and salutary, such is the emulation of artists and artisans." The fable of the nightingale and the hawk was suggested to him by all he had suffered through the injustice of kings.

Of the poems written between the ninth century (the supposed time of Hesiod) and the sixth, only a few fragments have come down to us. The seven sages were not philosophers, but practical men who endeavoured to inculcate and popularize moral ideas by means of short maxims and familiar discourses. They made no attempt at argument or discussion, being content to set forth clearly truths that were supposed to be either self-evident or based on some divine authority. The gnomic poets, Solon and Phocylides, likewise expressed in their moral reflections the results of human experience: the dangers of violence, the necessity of moderation in private as in public life, and so forth.

The Naturalism of Democritus. Mystic Morality of the Pythagoreans. The Sophists; Nature Opposed to Law.

Heraclitus and Democritus were the first philosophers to set forth ethical notions as the logical consequences of a philosophical theory. Heraclitus, while teaching that everything is in a state of flux and that nothing endures, counsels man to submit to the universal order of things, and to let himself be gently borne along with the unceasing flow of phenomena.

Democritus derives from sensuous principles the morality of an intelligent self-interest. He regards happiness as the end of life, but he makes it consist in good health, good humour, and peace of mind, and thus makes temperance its necessary condition.

The greatest moral teachers amongst pre-Socratic philosophers were the Pythagoreans. It is difficult to determine precisely the connection between their practical and their speculative philosophy, but the general tendency of their morality was mystic. The Pythagoreans taught that human life is in God's hands, and consequently they condemned suicide as an act of impiety.

But it was not by describing its delights that they sought to reconcile man to life; on the contrary, they maintained that it would be well for the soul to be delivered from the prison-house of the body, but she must respect God's commands, and remain on earth to expiate the sins of a former life. It would seem that for them the renunciation of happiness is the necessary condition of virtue. Temperance is the contest waged by the rational soul against the passions. The idea of Justice is expressed by the stern law of retaliation, and to define it the Pythagoreans use an untranslatable term, ἀντιπεπονθός,—"to suffer from another that which one has done to him." Friendship, for the Pythagoreans, was a manly virtue, free from all weakness. "We should help others to take up their burdens," they said, "but we must not carry them in their stead." In the rules of the community at Crotona, the asceticism of their teaching is still more marked. Pythagoras anticipated all the notions of the founders of monastic orders. The community of goods, celibacy, the rule of silence, prayer, hymns sung in common, and self-examination, are all enjoined by him.

"Let not thine eyelids yield to slumber, till thou hast submitted to thy reason all the actions of the day. 'In what have I failed? What have I done? Of what is commanded, have I omitted aught?' Having thus reviewed the first of thine actions, consider them all one by one in the same way, and if thou hast done wrong, humble thyself. If thou hast done well, rejoice" (*Golden Sayings*).

The influence of this austere morality of Pythagoras was destined to last long. Its traces are particularly visible in Platonism. In Pythagoreanism there appears for the first time the great conception of asceticism, which, broadly speaking, consists in sacrificing the natural to the moral.

In connection with this doctrine we may discuss a view which was more in accordance with the Greek spirit, and which found about the same time its first exponents in the Sophists—that of Naturalism. In ethics, as in politics, the starting point of the Sophists was the fundamental distinction made by them between nature (φύσις) and custom (θέσις). From this principle was derived their theory of Law (νόμος). The antithesis between natural and conventional laws, so eloquently set forth by Hippias (Plato, *Protag.* 337 c) was adopted

and expressed in similar terms by all the Sophists. Each, however, interprets it in his own way. For 'Nature' is one of the vaguest of terms, and the Sophists did not define it. But, beyond doubt, its truest meaning is that which was given to it later by Socrates and the Stoics, namely, reason; and this seems to have been the way in which Protagoras already understood it, when he said that Nature has given to all men the knowledge of what is just (*δίκη*) and of what is unjust (*ἀδίκος*), and when he makes moral justice thus founded on Nature, the basis of political justice (*Protagoras*, 322 a-c). Alcidas and Lycophron seem also to use the word in that sense, when they denounce as contrary to nature—the former the difference made by the laws between the freeman and the slave, the latter the distinction drawn by prejudice between the different classes of citizens. Thus the Law (*νόμος*), in so far as it is opposed to Nature (*φύσις*), is unjust and contrary to reason, and in so far as it is derived from and in accordance with Nature, it is the expression of reason itself.

But the Sophists did not believe in the validity of Reason, and if the masters did not deliberately preach immorality, their disciples were more bold. The speech which Plato puts into the mouth of Callicles (*Gorgias*, 482 c) shows what the result would be if this antithesis of Nature to custom were logically carried out. It is the will of Nature that the strong should rule over the weak. The man who had the intelligence to despise the conventional justice instituted by men, and the courage to defy them, would on his part seek to feel the reckless joy of life, to taste of all life's pleasures; confiding in his strength, which would make him feared by others, he would give full rein to his passions, and would always find the means of indulging them. It is in this way, that from time to time, in the midst of society, life according to Nature is realized in a few exceptional beings. The natural Laws also apply to the State, in a more general if less obvious way. Civil Law, according to Callicles, may be reduced to the will of the stronger, and according to Thrasymachus (*Plato, Rep.* I, 338 a) to the will of the Rulers. As for that purely human justice which forbids violence, it is a mere convention, a prejudice fostered by the weak, whose interest it serves: τὸ δίκαιον καὶ τὸ αἰσχρὸν οὐ φύσει ἀλλὰ νόμῳ.

The Sophists were always ready to assign a conventional origin to every kind of institution. Thus, their disciple Critias discerned in the belief in the Gods a successful artifice, employed by legislators in order that fear might prevent, or that remorse might disclose, secret crimes which would otherwise go unpunished. Such a free interpretation of political and religious notions was at that time both daring and original. It was a remarkable innovation in the world of thought that the law, to which in the beginning all nations ascribed a sacred character, should be reduced to the level of a natural fact.

The revolutions in Greece had taught their lesson. The different forms of Government, which men had seen alternately established by violence and by violence overthrown, had lost all prestige: and now philosophy, with its independent criticism, finished the work of making them appear contemptible. Unfortunately, the Sophists were inclined to exaggerate the artificial character of laws and institutions. That they should be regarded as a human, and consequently imperfect product, was enough, without further representing them as merely arbitrary, the result of caprice or of a blind force. To see nothing in the Laws except the inventions of Legislators, to ignore the natural basis on which they rest, was to be blind to the order which rules among human affairs. To leave to the established laws no *raison d'être* beyond the fact of their existence, was to deprive them further of authority and to justify beforehand those acts of violence which change for good or evil the character of a state. Thus for all their bold attacks on prejudice, the moral teaching of the Sophists was itself a reflection of the opinions of an age, in which the respect for law had been weakened by the melancholy spectacle of successive revolutions.

Socrates: Practical Morality; The Teaching of Virtue.

For the Sophists, the teaching of Wisdom had been merely an honourable and lucrative profession. For Socrates, it was the fulfilment of a duty to his country, and of a divine mission. He devoted himself to the moral instruction of the youth of Athens, and, unlike the Sophists, he never thought of procuring for himself a brilliant position. On the contrary, in order that he might the better take upon himself the care of souls,

he ceased to occupy himself with his affairs, and gave no thought to any concern of his own (Plato, *Apology*, 23•b). His preaching was enforced by the example of his life, of his private virtues and political courage. In truth, his great reputation for virtue was needed if the militant ardour and indiscretions of his zeal were to be forgiven him.

Socrates adopted a peculiar method of instruction which reflects a curious feature in Athenian life. The Greeks, whose private life was led in the market place, under the public gaze, allowed their philosophers to take a liberty which seems surprising to us,—that of choosing as a text for their moral lessons, the actions and conduct of any private individual among them. Socrates was the first to exercise this kind of moral censorship. He tells us himself that he was to all the citizens like a father or an elder brother, exhorting them to virtue (Plato, *Apol.* 31). We find him as virtue's true "agent" intervening with his advice in the intimate concerns of private individuals. He helps the young men, Glaucon and Charmides, in the choice of a profession (*Xen. Mem.* III, 6 and 7); he reconciles two brothers, Chærephon and Chærecrates, who had quarrelled (*Ibid.*, II, 3); he advises Aristarchus, weighed down by his numerous relations, to escape from his embarrassments by taking to work (*Ibid.* II, 7); filled with a touching interest in humble folk, he exhorts Diodorus to give help to Hermogenes in his poverty (*Ibid.* II, 10); and again, Eutherus is persuaded by him to accept the honourable yoke of domestic service, so that his old age may be sheltered from want (*Ibid.* II, 8). In a word, wherever there is a good action to be done or good counsel needed, there Socrates is always to be found.

In the process of giving moral advice Socrates, incidentally—if one may so express it—arrived at certain truths outside the compass of his theoretical scheme. We may not be able to find in his philosophy precepts condemning slavery or the subjection of women, but, with regard to the latter, he certainly taught that they should be treated with respect. In woman, he honours the mother and the wife. He makes gratitude the basis of filial piety, and exhorts his son Lamprocles to bear with Xanthippe's trying temper, remembering the devoted care which she bestowed on him in his childhood (*Mem.* II, 2).

• In conjugal life he regards woman as the equal of man. He made no distinction between them except such as springs from the different tasks in a concern that is common. To man belongs outdoor work, to women the care of all within, and the supervision of the house (Xen. *Oecon.* 1, 7). Good order in the household will of itself secure the kind treatment of slaves. The mistress of the house, of whom Socrates gives us an ideal portrait (*Ibid.*), herself takes care of the slaves when they are ill, preferring this task in fact to any other, because thereby she insures devoted servants (*Ibid.*) Socrates makes the position of the slave altogether honourable, when he declares that he respects him for his services, and when he points out to free men, who can only "eat and sleep," that they should take example by the slaves, whose labour brings ease and comfort to their employers (*Mem.* II, 7).

Such precepts, although they appeared in the modest form of practical advice merely, had nevertheless a very lofty import, and in order rightly to estimate their value, we must also bear in mind that they were at that time quite new.

Theoretical Morals : Virtue, Knowledge, and Happiness identical.

Notwithstanding all this, Socrates would scarcely deserve the title of philosopher if he had done no more than teach virtue in Athens; but, in fact, the noble thoughts communicated by his word formed in his mind a coherent system. Socrates has rightly been called the founder of Moral Science, for all his logical precepts (his *γνώθι σεαυτόν*, irony, maieutic, etc.) have significance only when applied to practical life. His belief in his own mission led him to declare that virtue was knowledge, and could therefore be taught (*Plato, Protag.*). When he said that virtue was knowledge, it was not the commonplace truth that it is necessary to think correctly in order to act well that Socrates announced. What he meant was, that one cannot separate knowledge from action, because, he who really knows the good understands also that it is his interest to do it, consequently he cannot do otherwise than choose it. The will cannot go against reason, and when it is enlightened it always makes for the good. Its weaknesses and faults are nothing but errors of the intelligence. This follows necessarily from

another principle, namely, that the interests of individuals always coincide with the general good. For with Socrates the good is neither pleasure as Aristippus understood it (*Mem.* II, 1), nor what it might please any casual individual to call the good, such as wealth or honour. It is that which is esteemed by all men without exception, that which all men agree in proclaiming fair and good, καλοκάγαθόν, and which is so in fact universally and at all times,—as are temperance and justice.

Now the good thus understood is the supremely useful; for whilst the value of riches, for instance, depends on the use that is made of them, and they may consequently be as harmful to one as they are useful to another, justice, on the contrary, is in itself of so great a worth that its possession is always and necessarily a good. The man that is guided by his own interest must always choose the Good, or virtue, and whoever first committed the error and the crime of separating the Good from the Useful is consigned by Socrates to the infernal gods.

The good being identical with the useful, it follows that happiness is the end of virtue. But happiness is itself reducible to virtue, and finds in virtue its immediate realization. For, according to Socrates, reason makes us despise external goods, the signs of the uncertain favour of fortune or of the gods (εὐτυχία). Reason conceives happiness (εὐπραξία) as a holy joy, which implies the renunciation of common delights. In this high sense of the term it may be truly said that happiness does not deceive the hopes of those who put their trust in it, and make themselves worthy to enjoy it.

The means of attaining a happy life are the virtues, and the virtues are in their turn different kinds of knowledge. But the virtue *par excellence* is wisdom, or the general knowledge of the Good, while the other virtues are parts of wisdom, each being the special knowledge of a particular kind of good. Thus, temperance is knowledge of the true good, as distinguished from the false good which men call pleasure; courage consists in the just appreciation of merely apparent evils, such as sickness or death, which are not to be feared, and of true evils, such as injustice, which should be shunned; finally, justice is knowledge of that which is permitted or forbidden by human or divine law.

• If happiness and virtue are one, and if, in consequence, no one is voluntarily evil, it is because the good has for man a power divine. Hence the good has its origin in reason, and not, as the Sophists said, in convention. There are two kinds of laws, the written and the unwritten.

“‘But are you aware, Hippias,’ asks Socrates, ‘that there are unwritten laws?’ ‘You mean those,’ asked Hippias, ‘that are in force about the same points everywhere?’ ‘Can you affirm then that men made those laws?’ ‘How could they,’ said Hippias, ‘when they could not all meet together, and do not all speak the same language?’ ‘Whom, then, do you suppose to have made those laws?’ ‘I believe,’ said he, ‘that it was the gods who made those laws for men, for among all men the first law is to respect the gods’” (*Mem.* IV, 4).

The distinctive characteristic of the unwritten laws is that they are universal, divinely instituted, and, as Socrates adds, that they carry with them their own sanction.

“Those who violate the laws made by the gods incur punishment which it is by no means possible for them to escape . . . many transgressors of laws made by men escape punishment, some by concealment, others by open violence” (*Ibid.*).

Thus, to the distinction, which had been established by the Sophists, between natural and positive laws, Socrates gave a new, and, at the same time, a more rational and accurate meaning. And, while the Sophists only aimed at destroying the authority of the laws, Socrates restored and strengthened it by finding in the unwritten laws the source of the written laws, and by making these participate in the sanctity and majesty of the divine model of which they are, in his opinion, an imperfect image. (*Crito*).

Plato: The Virtues; Their Principle in Wisdom; Their Unity in Justice.

Plato adopted the ethical conceptions of Socrates, but as was always his way, he gave them a wider significance and a new authority by bringing to light the metaphysical principles which were implied in them. He distinguishes three parts in the soul, and assigns to each a special function and a special excellence. Appetite (*ἐπιθυμία*), which has to be regulated and restrained, only gives rise to a negative virtue, *temperance*. The spirited passion (*θυμός*), being enlisted in the service of

virtue, becomes *courage*. Finally, *Reason* (*νοῦς*), when true to herself, takes the name of wisdom.

If, on the one hand, the desires and needs of the body must be satisfied to the extent necessary for its preservation, they should, on the other hand, be fought against as an obstacle to divine life, and, more especially, to the attainment of truth. In the highest and most philosophic sense, temperance is, for Plato, the renunciation of pleasure and the release of the soul from the body (*χωρισμός ψυχῆς ἀπὸ σώματος*, *Phaedo*, 67 d). Plato describes it in mystical language as "the practice of dying."

Appetite (*ἐπιθυμία*), which is lawless and blind, can be conquered only by setting against it the spirited passion which, of its own impulse, makes for the good. Courage thus completes the work of temperance; one is the struggle against pain, while the other consists in resisting the soft seductions of pleasure. Both are essential elements of wisdom. By delivering the soul from the fetters of desire which bind her to the body, these virtues restore her to herself, and to that contemplation of true Being, of the Good, which for Plato, as for Aristotle, is the supreme end of moral life. Wisdom is not only first among the virtues, it is also the principle of them all.

"Then all but the philosophers are courageous from fear, and because they are afraid; and yet that a man should be courageous from fear, and because he is a coward, is surely a strange thing. . . . And are not the temperate exactly in the same case? They are temperate because they are intemperate, which might seem to be a contradiction, but is nevertheless the sort of thing that happens with this slavish temperance. For there are pleasures which they are afraid of losing, and in their desire to keep them they abstain from some pleasures because they are overcome by others. . . . Yet the exchange of one fear or pleasure or pain for another fear or pleasure or pain, and of the greater for the less, as if they were coins, is not the exchange of virtue. O my dear Simmias, is there not one true coin for which all things ought to exchange?—and that is wisdom; and only in exchange for this, and in company with this, is anything truly bought or sold, whether courage or temperance or justice. And is not all true virtue the companion of wisdom, no matter what fears or pleasures, or other similar goods or evils may or may not attend her? But the virtue which is made up of these goods, when they are severed from wisdom and exchanged with one another, is a shadow of virtue only, nor is there any freedom or health or truth in her" (*Phaedo*, 68 d).

• Thus the virtues owe their value to the principle of wisdom from which they flow. Plato's contemptuous disparagement of interested virtue seems to offer an anticipatory criticism of Epicureanism.

The different virtues, therefore, are all inspired by the same spirit of wisdom, and all participate in the same idea of the Good. Besides their unity of origin, their end is also one, which they pursue in common, and of which their harmonious activity is the realization. For although each of these virtues has an absolute value, and is an end in itself, the particular ends, named Courage, Temperance, Wisdom, have nevertheless, their place by relation to a still higher end, which is Justice. By Justice is meant, in Platonic language, an internal virtue, the peace or harmony established in the soul by the rule of reason.

The virtues, therefore, are not isolated, but one and whole. We have already seen that courage and temperance are sisters, being both the daughters of wisdom; these sisters, we may add, go hand in hand. Plato shows clearly the unity of the moral life, when he makes the law that governs the intellect extend to the will, and when he further introduces a dialectic of the passions, and a hierarchy of the virtues. In one sense, temperance and courage are merely relative virtues, for, in purifying the soul from passion, they only prepare it for wisdom, which alone has absolute value. Here Plato seems almost to draw the same distinction between the practical and the contemplative life, as that made later by Aristotle. But according to Plato these two lives are in reality only one. While it ascends from one degree to another, virtue at the same time preserves the unity of a movement that is continuous; under all the variety of names, it is always the same impulse which carries us towards the Good.

Transition from justice as the virtue of an individual, to justice considered as a social virtue, is suggested by the nature of things. The law which rules the mutual relation of the faculties of the soul also regulates the relations of men to one another and of citizens within the state. Reason, which, in the state, is represented by its rulers, controls the passions and the lower appetites, which are in turn represented, the former by the soldiers, the latter by the artisans and labourers.

Each class, having in the state its special function, has also its special virtue, and so Plato, speaking of the state as he would of the citizen, calls it wise, courageous, temperate, and just (*Rep.* IV, "Chap." VI). Politics with him were thus merely Ethics on a larger scale.

The social virtues, on the other hand, depend on individual morality: in order to live in peace and harmony with his fellows, the individual has only to make harmony rule in his own soul. Virtue is in no sense merely a personal thing: its object is the Good in itself. To attain virtue is, therefore, not merely to pursue one's private perfection, or a good that is relative to one's particular nature, as Aristotle says afterwards (*οἰκεῖον ἔργον*); it is to make the universal end one's own end, and thus to join in the harmonious unity of rational wills. The whole theory of special virtues rests upon the conception of an absolute Good. It is because the Good has an absolute value, that we must always practise it, at whatever cost to our love of ourselves, or our hatred of others. Justice consists, not as the old maxims said, in doing good to one's friends, and evil to one's enemies, but in doing good to all men without distinction. "Injustice is always an evil" (*Crito*, 49 a). Thus Plato enjoins the forgiveness of injuries. His precepts are in the very terms of Christian charity; but they were not inspired by the same spirit, for he puts them forward as a metaphysical deduction, as the sublime result of intellectual insight, rather than of an impulse of the heart.

The Supreme Good and its Constituents; Pleasure and Knowledge; Virtue and Happiness; Expiation.

With Plato, as with all the ancients, the object of Ethics was the determination and explication of the nature of the Supreme Good, or "*Summum Bonum*," that is to say of the good that is self-sufficient (*αὐτάρκεια*). "Is the good sufficient?" asks Socrates, in the *Philebus* (20). "Yes, certainly," says Protarchus, "and in a degree surpassing all other things." Among the things that men call good, which is it that fulfils the condition of supreme good? Is it pleasure? No, for pleasure derives its value, not from itself, but from its union with mind. Pleasure would be nothing did we not perceive it when it arises, recall it in thought after it has

disappeared and anticipate it before it comes. • Pleasure has value, only because it is given with consciousness, with memory and reflection, in a word with mind. Moreover, we make a distinction between pleasures that are real and pleasures that are false, and as the mind is the only judge of truth, pleasure from this point of view also, depends on knowledge. Thus pleasure is indeed a good, but a relative, a subordinate good, in no way deserving of the title of Supreme Good (*Philebus*, 21 b *et pass.*). Is knowledge, then, the Good, seeing that to it pleasure owes its worth?

"I want to know," asks Socrates, "whether any one of us would consent to live, having wisdom and mind and knowledge and memory of all things, but having no sense of pleasure or pain, and wholly unaffected by these and the like feelings?" (*Ibid.* 21 d).

This simple question is substantially the same as that which is presented in dramatic form in the poem of *Faust*, and the answer given by Plato harmonizes also with Goethe's conception. Wisdom is not the good, and the life of thought is not happiness. Still, as pleasure and knowledge are the only goods we know, the supreme good, if it exists, must be in them; and as it cannot be in either of them, taken separately, it follows that it must be in the union of both. The Good therefore is a mixture; it is fed from two sources. "And here are two fountains which are flowing at our side; one, which is pleasure, may be likened to a fountain of honey: the other, wisdom, a sober draught in which no wine mingles, is of water, unpleasant but healthful" (*Ibid.* 61 c).

In the mixture of which the Good is composed all the sciences are included, for they are all good, though in different degrees; between pleasures, on the other hand, a choice has to be made, for only the pleasures that are true and pure can enter into the composition of the Good. Thus Plato does not admit that simplification of ethics by which the Supreme Good is reduced to a single principle, whether this principle be contemplation, as with Aristotle, or common pleasure, as with the Cyrenaics. For Plato, the Supreme Good is a mixture in proper proportions of pleasure and wisdom.

The notion expressed by the ancients in the term Supreme Good is also complex in another sense, and made up of elements which were later considered to be heterogeneous, namely, Virtue

and Happiness. What, then, is virtue? What is happiness? And how was their relation to one another conceived by Plato?

Virtue, as the Pythagoreans had already said, is "*the being made like unto God*" (*ὁμοίωσις θεῷ*); and God is the One, or the Good, in contrast to matter, which is the principle of the many, or the evil. To be like unto God is to escape from the material or sensible world, which is of necessity the abode of evil, and to take flight towards the world of Ideas (*Theætetus*, 176 *a*). In the less obscure language of psychology, this metaphysical definition means that virtue, that flight towards the region of things eternal (*φύγη*), is detachment from sense and the cultivation of reason (*Φηredo*). Moreover, as God is the One, virtue, or imitation of God is a kind of participation in the divine Unity. No doubt, man, inasmuch as he consists of a body composed of many elements and of a soul possessed of many faculties, cannot become one; but, in so far as he keeps his body subject to his soul, and the faculties of his soul subject to his reason, he realizes such unity as his nature admits of,—a unity, that is, made up of divers elements, and which manifests itself in the midst of multiplicity. And thus Plato could say, following another Pythagorean maxim, "Virtue is a harmony, and the wise man is a musician."

Virtue brings happiness in its train (*Rep.* I, 354 *a*), because virtue is the natural good of the soul. The just man is always happy. No doubt he is exposed to the blows of fortune—he may be shamefully treated by his friends; he may, as the victim of a blind hatred or of a base betrayal, be dragged to prison and scourged; he may find an end to his sufferings in death at the stake; but "stripped of everything except Justice," he still possesses true happiness (*Rep.* 362 *a*). For it is when virtue is subjected to humiliating insults that she emerges, not only worthy of all veneration, but triumphant. And as the just man is happy, even on the cross, so the tyrant is miserable and hateful, even on his throne or in the midst of delights.

From the connection established by Plato between virtue and the Happy Life, there follows, as a consequence, a doctrine which appears to us startling, and not at all in harmony with the Greek spirit: the rehabilitation, and, as it were, the vindication of pain.

• Our moral offences cannot of themselves be blotted out. Only by suffering punishment can we atone for them. And from this idea that expiation is necessary, follows that of suffering as justified. Pain is not an evil; the greatest of all evils, on the contrary, would be not to suffer the punishment our offences deserve; and hence, far from fearing punishment, we should desire it and even seek it. If we have a friend who is guilty of a crime, our love for him commands us to drag him by force before the tribunal, to denounce him before the Judge, to demand and obtain his condemnation. We must see that he pays the penalty of his crime, and that in this way he is reconciled to the Good. And with still more reason we should exercise the utmost severity in dealing with ourselves.

"And if he, or any one about whom he cares, does wrong, he ought of his own account to go where he will be immediately punished; he will run to the judge as he would to the physician. . . . He should even force himself and others not to shrink, but with closed eyes, like brave men, to let the physician operate with knife or searing iron, not regarding the pain, in the hope of attaining the good and the honourable. Let him who has done things worthy of stripes allow himself to be scourged, if of bonds to be bound, if of a fine to be fined, if of exile to be exiled, if of death to die, himself being the first to accuse himself and his own relations, and using rhetoric to this end, that his and their unjust actions may be made manifest, and that they themselves may be delivered from injustice, which is the greatest evil. Then, Polus, rhetoric would indeed be useful" (*Gorgias*, 480).

How did so novel a theory suggest itself to Plato? It would seem that the philosopher, in giving to it an ethical meaning, had purified and refined the idea of expiation which plays so important a part in Greek mythology (e.g. the legends of Oedipus, Orestes, Nemesis), and that out of a gross superstition he had brought forth the Christian doctrine of expiation by suffering.

When he represented the relation of virtue and happiness as necessary, Plato did not mean that this relation is to be established some day in another life. He held that it must always be, and that it therefore exists actually, at the present moment. Moreover, even if the good man were to regard faith in a future life as only a "splendid possibility" (*καλὸς κίνδυνος*) he would still, like Socrates, face death in a calm, serene spirit, without murmuring against either justice or the gods.

Aristotle: The Moral Law; Virtue and Happiness; The Virtues; Justice and Friendship; The Contemplative Life.

"Indubitably, Plato the Athenian was a true Greek, but added to, and mixed with the national qualities so conspicuous in him, there was, one might almost say, something Christian in his manner of thinking and speaking. Aristotle, on the other hand, represents with singular exactness the genius of ancient Greece. No other moralist has given us an ideal picture, drawn from life, in which what is most profound and most enduring in the Greek mind is so happily expressed" (Ollé-Laprune, *Morale d'Aristote*, pp. 67-69). The idea of moderation, of harmonious activity, of happiness through reason (κατὰ τὸν ὀρθὸν λόγον), of fitness, and of beauty (τό καλόν), prevail throughout all Aristotle's speculations on the moral life.

Practical reason (φρόνησις) differs from wisdom (σοφία). Ethical questions do not admit of mathematical exactness. We must not expect equal accuracy in all branches of knowledge, τὸ γὰρ ἀκριβὲς οὐχ ὁμοίως ἐν ἅπασιν τοῖς λόγοις ἐπιζητητέον (1094, B. 12), but only to the extent the subject studied admits of: πεπαιδευμένου γὰρ ἐστὶν ἐπὶ τοσοῦτον τὰκριβὲς ἐπιζητεῖν καθ' ἑκαστον γένος ἐφ' ὅσον ἡ τοῦ πράγματος φύσις ἐπιδέχεται" (24). In short, what Aristotle says concerning equity as contrasted with justice, would apply to the whole of his Ethics. The rule of what is indeterminate must itself be indeterminate, τοῦ γὰρ ἀορίστου ἀόριστος καὶ ὁ κανὼν ἐστὶν (*Nic. Ethics*, Bk. V, Ch. 10).

According to Aristotle, experience of life and practice in doing good actions produce in the soul as it were an eye which is able at first sight to perceive and discern the true principles by which our conduct should be governed, the good or evil in any case. We should follow these intuitions of our inner life with the same confidence as the principles of science. "And on this account we ought to pay the same respect to the undemonstrated assertions and opinions of persons of age and experience and prudence, as to their demonstrations" (*Nic. Ethics*, Bk. VI, Chap. 11).

Aristotle constantly repeats that the virtuous man is the rule and measure of the Good (ὁ σπουδαῖος κανὼν καὶ μέτρον). And this rule is universal as well as particular, for in the case of the virtuous man it is not opinion that decides, but right reason realized and living in him. Being truly man, he is

pleased with what ought to please him, he distinguishes clearly the good from the evil; he is the rule and measure of things.

Experience and practical reason show us that the end of man, his supreme good, is happiness (*εὐδαιμονία*). But what is happiness? Pleasure completes an action, is added to it, as "to youth its bloom." The being which acts according to its nature finds pleasure in the very consciousness of its own perfection, and when of all the actions of which its nature renders it capable, that being accomplished, the highest and the most essential to that nature, then it tastes of the purest and most intense joy (*ἄριστον γὰρ καὶ ἡδιστον*). Now virtue for any being consists in performing excellently its special function, *πάντα ἀρετὴ οὐ ἂν ἢ ἀρετῇ, τὸ ἔργον αὐτοῦ εὖ ἀποδίδωσιν* (*Nic. Eth.* II, 6), the virtue of man consists in exercising most fully the highest functions of man.

Thus happiness is life according to virtue, and according to the most perfect virtue. Nature actual and ideal, the End and the Good, Virtue and Happiness, these terms all imply and explain each other. It is in this sense that happiness is the principle of all human action (*τὸ ἄριστον*), the end for whose sake everything else is willed, and which is itself willed for its own sake only, *τὸ καθ' αὐτὸ αἰρετόν* (1199 a 33). So far everything is clear. Happiness comes from perfection and is identical with virtue. But Aristotle, taking into account the conditions of human life, affirms that external goods (*τὰ ἔκτος ἀγαθὰ*) are necessary to happiness. The virtuous man may despise ordinary misfortunes, which are to him only an opportunity for displaying his courage, but misfortunes such as those of Priam, without making him absolutely miserable (*ἄθλιος*), still prevent him from being quite happy (*μακάριος*). To be complete, happiness requires that the favour of the gods be added to merit. In order that there may be nothing more that he could desire, a man must taste of the joys of friendship, and of family affection; he must have political power, wealth, high birth, beauty; in short he must lack none of those useful accessories which are the ornament of life. This does not mean that we cannot be happy without all these advantages. The pursuit of happiness entails, on the contrary, many sacrifices to which reason consents; but so long

as those conditions of which fortune disposes remain unfulfilled, there is still something wanting.

If our happiness depends in part on fortune, it would seem that virtue, which is a habit whose principle is in the will, ought to be more independent and more clearly defined. But virtue itself is no more than a means of attaining happiness, and therefore it has no intrinsic, or unconditional value. It is, moreover, relative to the agent, and varies with the individual. This follows from its very definition; it consists in "finding pleasure and pain in the right objects" (*Nic. Eth.* II, 3). It is the habit of behaving, with regard to the passions, in such a manner as to avoid all excess, and always to observe the *due mean* (τὸ μέσον): courage, for instance, consists in keeping at an equal distance from the two extremes of cowardice and temerity. "And the mean with which we are here concerned varies in different individuals. If ten pounds of food is too much for a given man to eat, and two pounds too little, it does not follow that the trainer will order him six pounds, for that also may be too much for the man in question or too little; too little for Milo, too much for the beginner" (*Nic. Ethics*, II, 6). Moral obligations are not the same for every one. "Temperance (σωφροσύνη) is not the same for woman as for man" (*Polit.* III, 4).

But does not virtue, once it is determined by the particular nature of the agent, at least depend exclusively on the will of the latter? One might be inclined to think so, remembering that the peculiar and essential characteristic of virtue is that it involves free choice, intention or preference (προαίρεσις). But while he asserts that the honour or merit of virtue belongs to the will, Aristotle is far from holding that volition alone is of consequence, and that the action is accessory or unimportant. According to Aristotle, the whole of morality consists in *willing* to observe in all things the due mean, and in *actually* observing it. We see that in this way Aristotle leaves man at the mercy of external circumstances. "To be liberal one must have something to give, to be just one must be able to requite those who have done us good, etc."

Nor is this all: virtue can only develop in the state. It is a law of nature that man only becomes virtuous amongst his fellows. To sum up: virtue, which, by definition, is relative

and contingent, since it depends on the nature of the individual, is further subject to two kinds of conditions: the accidental conditions of fortune, and the better defined and less unstable conditions of the state.

It is unnecessary to examine in detail the virtues that are enumerated and described in the *Nicomachean Ethics*. But among those which Aristotle honours with an analysis we must note certain exceptional virtues which are altogether Greek and aristocratic, such as Liberality (*Nic. Eth.* IV, 1) and Magnificence (*Ibid.* IV, 2) which are reserved for the wealthy; for they consist, the one in making good use of money in general, the other in the right use of a large fortune. Magnanimity is a still more exclusive virtue, for, besides high birth, it implies a great soul, a cultivated mind, superior talents, in a word, everything that would justify the highest ambition.

The fact that Aristotle makes a virtue of political capacity and of the right use of wealth, shows sufficiently the character of his ethics. The ideal which he proposes is not an abstract ideal, or one that appears in violent contrast with the customs of his time. It is an ideal, born, so to speak, of what was actual, in harmony with Greek life and adapted to its form of government and classes of society. The virtues of which he makes the most exhaustive study are accordingly the virtues of social life: justice and friendship.

The beauty of justice he extols in the following words: "Neither evening nor morning star is so lovely" (*Nic. Ethics*, V, 1). He adds that, according to the poet Theognis, justice includes all the other virtues, for it is in truth "a good to another," ἀλλότριον ἀγαθόν. Everything that tends to produce prosperity in civil life, or to increase it, belongs to justice: and since everything that concerns morality is part of the social order, that which virtue requires is also ordered by the law. Between the political and the moral life there is not only interdependence, but a perfect analogy.

But Aristotle also gives the name of justice (*Ibid.* V, 2, 3) to a special virtue, which consists in observing equality, either in the distribution of honours, wealth, etc., or in exchange, in social transactions (selling, buying, lending, salaries, etc.), and the repression of legal offences and crimes. In this second case, all that justice demands is that the things exchanged be strictly

equal in value, that the punishment be exactly proportioned to the wrong. But in the former case justice is not so easily satisfied; it demands that the merit of persons be taken into account, as well as the value of things. Aristotle states in mathematical terms the different rules belonging to these two kinds of justice. Distributive justice has for its symbol *Geometrical proportion*, while the rule of exchange and of penalties is represented by *Arithmetical proportion*.

Aristotle pays particular attention to political virtue, and divides it into *legal justice*, which is conventional and variable, and *natural justice*, which depends neither on the decrees nor on the opinions of men, but has the characteristic of being universal and immutable. On this important distinction is based the theory of *equity*, which consists in appealing to natural law against the severities and injustices of conventional law.

"Though what is equitable (*τὸ ἐπιεικές*) is just, it is not identical with, but a correction of that which is just according to law, *ἐπανόρθωμα νομίμου δικαίου*. The reason of this is, that every law is laid down in general terms . . . and the essence of what is equitable is that it is an amendment of the law, in those points where it fails through the generality of its language" (*Nic. Eth.* V, 10).

Aristotle compares equity to the Lesbian leaden rule, which, following the outline of the stone, gives a more exact measure than the iron rule, which is the symbol of mere legal justice.

By means of justice good order is established in the State, but friendship brings about the true union of the citizens. Friendship may be extended to all men, and it then becomes philanthropy (*φιλαθροπία*). Thus understood, it involves justice and surpasses it.

"Friendship is the bond that holds States together. . . . If citizens be friends, they have no need of justice, but though they be just, they need friendship or love also; indeed, the completest realization of justice seems to be the realization of friendship or love also" (*τῶν δικαίων τὸ μάλιστα φιλικὸν εἶναι δοκεῖ*) (*Nic. Ethics*, VIII, 1).

Nowhere does Aristotle's identification of politics and ethics, of social and private virtue, appear more clearly than in his theory of friendship. He upholds, for example, in friendship, the rules of an uncompromising justice, in which the virtues of both parties are strictly taken into account. Of two friends

the better man should be loved more than he loves. The rights of moral superiority must be maintained. True friendship has its origin neither in pleasure nor in interest, but in virtue. Among men we love those who are good, and we love them because of their goodness. Consequently the only true friends are good men, who become united with the sole object of becoming better, and hence more lovable. In fact, in friendship as in virtue disinterestedness is the essential feature. Aristotle speaks with contempt of those friendships which are made and unmade with a view to advantage. Such are the friendships formed by politicians and the aged. The kind of friendship he holds up as a model, is that of a benefactor or a mother's love. He would have us love our friend for his own sake, and love him like ourselves (ἑτῆρος γὰρ αὐτὸς ὁ φίλος ἐστὶ, *Nic. Ethics*, IX, 9). In short, he makes the perfection of friendship consist in loving rather than in being loved (δοκεῖ δ' ἡ φιλία ἐν τῷ φιλεῖν μᾶλλον ἢ ἐν τῷ φιλεῖσθαι, *Nic. Ethics*, VIII, 8).

The object of practical life is not the absolute good, but a particular or determinate good (οἰκείον ἔργον πρακτὸν ἀγαθόν), the good that is conformable to the nature of man; but the life of contemplation gives us that perfect happiness, which transcends our sensible nature, and belongs to God alone. In contrast with the intellectual virtues, the moral and political virtues fade into insignificance, for their worth is not in themselves; they are only the auxiliaries of wisdom. By subjecting the soul to reason, they prepare the way for the divine life.

"As the steward of a great house looks after everything in it, orders everything, so that the management of domestic affairs may not prevent the master from attending to his duties as a citizen; so does prudence, by restraining and controlling the passions, secure for wisdom the leisure she requires in order to perform her own functions" (*Magna Moralia*, I, XXXV, 1198b 12).

Moreover, wisdom, once it is born in us, is self-sufficient. The wise man need not go outside himself to seek happiness. He finds it in his own contemplation; and if political life still has any attraction for him, it is solely because he may be able to make others share in his thoughts. He need not even practise the moral virtues any longer. He has only to develop within himself eternal and divine reason.

"Nevertheless, instead of listening to those who advise us, as men and mortals, not to lift our thoughts above what is human and mortal, we ought rather, as far as possible, to put off our mortality": ἐφ' ὅσον ἐνδέχεται ἀθανατίζειν (*Nic. Ethics*, X, 7).

But how can we enter into the divine life? God is blessed in Himself and in virtue of His nature. He is at once pure intelligence and pure actuality; He is eternal thought, which finds its eternal object in itself. Our nature does not itself provide all that is necessary for contemplation. (οὐ γὰρ αὐτάρκης ἡ φύσις πρὸς το θεωρεῖν). As human beings, we need external goods (*Nic. Eth.* X, 8). Our passions are an obstacle to perfect happiness, which lies in intelligence alone. We have then first to fight against our sensible nature; and for this we employ the *moral virtues*. But as it is by reason that we are distinguished from all other beings, so also in reason is found that happiness which is truly human, although modelled on the divine felicity.

"Happiness, then, extends just as far as contemplation, and the more contemplation, the more happiness is there in a life—not accidentally, but as a necessary accompaniment of contemplation; for contemplation is precious in itself" (*Ibid.*).

But could Aristotle represent the moral end, now as human happiness, and now as divine blessedness? Could he, without contradiction, declare, on the one hand, that the virtuous man is the measure of virtue, and, on the other, that virtue consists in making one's self immortal? Certainly he could, for to him prudence (*φρόνησις*) already implies reason, moral life being thus the promise and manifestation of the intellectual or divine life (ὁ κατὰ τὸν νοῦν βίος). It is true that there is in each of us a beast and a god, but the aspirations of the beast tend to nothing less than oneness with the thoughts of God. Prudence is not different in nature from reason (*νοῦς*). Man possesses prudence naturally, he advances willingly towards reason, and, leaving his animal nature, he ascends to God. The entrance into immortality is the glorious goal of his moral life. From action to contemplation there is no abrupt transition, but a gradual ascent, a continuous aspiration. And so without inconsistency the practical and the speculative life may be said to become one.

Character of Post-Aristotelian Ethics: Individualism.

Post-Aristotelian philosophy is characterized by the subservience of every branch of investigation to ethical ends. Human thought seems, at the time of Zeno and Epicurus, to free itself from metaphysical speculation, just as at the time of Socrates it had lost all interest in hypotheses as to the origin of the material world.

At the same time; the revolution that had already taken place in the practical sphere being transferred into the world of thought, man's individual life was now conceived as having an intrinsic value, and consequently a destiny and an aim other than the performance of his functions in the state. While Plato could find consolation for the unhappiness of the citizens in the thought that the state is happy, while Aristotle makes so little distinction between political and moral life that he regards happiness, if not virtue itself, as the special privilege of the free, Epicurus, like Zeno, places the end of man in man himself, frees him morally from his obligations to the state, and finds a use for his life even when the political career is closed to him. Thus, from the advent of Epicureanism and of Stoicism, there dates a new period in philosophy, that in which the individualistic conception is introduced into ethics.

The Precursors of Epicurus: the Cyrenaics.

But, as it is in the nature of ethical doctrines not to belong to any exact date, and often to be in advance of the historical facts with which we connect them, there is nothing surprising in the fact that an immediate follower of Socrates, Aristippus of Cyrene, should be the forerunner of Epicurus. Aristippus starts from the Socratic principle that happiness is the end of man. He makes happiness consist in pleasure, and in any kind of pleasure, provided it is present, and hence felt; but he does not adhere to this gross conception, which would be the negation of all morality. He adds, as corrective, this important rule, that in the midst of pleasure man should preserve internal freedom, maintain possession of himself. Thus he says of himself, "I possess Lais and am not possessed by her," ἔχω καὶ οὐκ ἔχομαι. Theodorus the Atheist, a disciple of Aristippus, finds this internal liberty of which Aristippus speaks, in in-

dependence and intellectual boldness. In ethics, as well as in religion, he professed opinions which would justify his double name of *ἄθεος* and *θρασύτατος* (D.L. II. 116). Taking the consequences of an action as the measure of its worth, he held that robbery, sacrilege, adultery could, in certain cases, be permitted; thus he did not shrink from the most extreme consequences of Hedonism.

A more surprising consequence of the development of this same doctrine is the pessimism of one of the last of the Cyrenaics, Hegesias (300 B.C.), surnamed "the advocate of death" (*τρεισιθάνατος*). If pleasure is a fleeting thing that cannot be seized, how can we set it up as an end? How are we to avoid the disgust and satiety that we find in it? We make pleasure the object of life, but who can fail to see that this object will never be attained? The inference is that we must renounce life, which is the source of every kind of illusion. Strange result of a philosophy of pleasure!

Epicurus: Definition of Pleasure; Pleasures of the Mind; Theory of the Desires; Virtue.

Epicurus sought to free man from the yoke of passion, and the tyranny of the gods, and to give him "that impenetrable rampart of liberty of heart which nothing can force" (Fénelon). In order to take away the government of the world from the gods, a materialistic system of physics was needed, and this physical system involved an empirical logic. Thus the whole Epicurean philosophy is constructed with a view to their ethics, for which it prepares the way, and which completes it.

By the doctrine of Atomism, man is delivered from the chimeras of superstition—the fear of death, the fear of hell, the fear of the gods. This is the threefold chain broken by the Epicurean physics. The gratitude of the disciples of Epicurus (for they almost adored him as a redeemer), their cult of the master's memory (charms, rites, etc.), show with how strange an oppression the ancient superstition had weighed upon them (see Martha, *The poem of Lucretius*).

When the mind has been purified by the principles of physics, the initiation into the deepest mysteries of Epicurean ethics may commence. The gods are so far away that it is only seldom that some *simulacrum*, escaping from their glorious

bodies, traverses space, and reveals to us their existence. Nature, left to herself by the gods, is all that man has to deal with. What then in nature is the supreme good which he should aim at? Like Aristippus, Epicurus replies, "Pleasure." For has not the canon¹ proved that the affections (*τὰ πάθη*), the impressions, that is, of pleasure or pain, are the only means we have of distinguishing good from evil, of knowing what is to be desired and feared, to be sought and avoided?

In the second place, observation shows that all animals, from the moment of their birth, seek pleasure and avoid pain. This, then, is the first principle of Epicurean ethics: Avoid pain; seek pleasure. The next question is, What is pleasure? We have to distinguish two kinds of pleasure; the first, passive pleasure, is calm and enduring; the other, active pleasure, is lively, rapid, fleeting. The first is the freedom from all pain, all anxiety; the second is excited in us by a titillation of the senses, and invites us to satisfy the needs of the body. What it requires is the tranquil sense of enjoyment that results from the performance of all one's functions. It is the state of comfortable existence which good health produces. Not to suffer in body, to be untroubled in mind, these are the two conditions of happiness. The pleasures of the body, which are always mixed with uneasiness and feverishness, only remove want, and prepare the way for the true pleasure, which consists in the peaceful slumbering of all pain and of all passion.

The pleasures of the soul are a thousand times more precious than those of the body, for the body is only affected by the present impression, but the mind enjoys the present, the past, and the future. We must not, however, mistake the sense of this teaching. As anticipation (*προλήψις*) implies the remembrance of past sensations, the pleasure of the mind is in reality the renewal in memory of sensible pleasures accompanied by the hope that they will be experienced again.

"For I do not know what I can consider good," Epicurus said, "if I put out of sight the pleasures of eating and drinking, of hearing and seeing, and of love" (D.L. x, 6). "Metrodorus, the sage colleague of Epicurus, blamed his brother Timocrates because he would not allow that everything which had any reference to a happy life was to be measured by the belly" (Cic. *De Natura Deorum*, I, 40, 113).

The rôle of the mind is to anticipate the pleasure that is to come and to preserve past pleasure. The mind soars above present, actual pain, and remains in a contented state, knowing that the good moments of life are more numerous than the bad, and remembering all the pleasure it has experienced, or may possibly experience. In this way it can escape from the present, and enjoy life as a whole, and this is an enjoyment that cannot be taken from us. Epicurus also advises us not to think of future evil. An evil does not become less by being thought on, and it is a foolish (*stulta*) meditation that dwells on a future evil which may never come to pass. "*Calamitosus est animus futuri anxius et ante miseras miser*" (*apud Sen.*).

There is an analogy here between the doctrines of Epicurus and those of Zeno. Zeno does not find the good in particular acts, but in the harmony of the whole life. Similarly, for Epicurus, bodily enjoyments are only the material of the good, which itself consists in reflection upon pleasures. The reflection of Epicurus, like the will of the Stoic, overcame the limitations of time. By staying itself on the memory and on the hope of a happier state, it is able to offer adequate resistance to the present evil. The analogy is, however, not complete, for with the Stoics the object of the will is duty, while with the Epicureans it is pleasure.

But it is not enough to know that true happiness consists in freedom from pain and in peace of mind. We must seek and find the means of realizing this ideal. The swerving of the atoms becomes free will in man, and it depends on ourselves alone whether our lives are shaped after the model of those of the gods, and imitate the serenity of their blessed existence. "Better be still in the trammels of the common superstitions concerning the gods, than bound by the fatalism of physicists. One might still hope to move the gods to pity, but necessity is inexorable." In order to attain this wisdom which is so precious, we must discover exactly what it is that nature demands, which are the desires the satisfaction of which is a law of nature ratified by pain. To this question Epicurus replies by his theory of the desires.

There are, in the first place, desires that are natural and necessary. These are easily satisfied. "Are not bread and

water an excellent repast when one is hungry and thirsty?" But we have to remember that carnal pleasure is merely a means to an end, that it disappears as soon as the pain caused by the want has ceased, that to attempt to prolong it is a folly which would be certain to result in pain; and we should recognize the benevolence of nature in that she demands so little. Then there are desires that are natural but not necessary: the instinct of reproduction, the love of parents for their children. These desires are indeed natural, since all animals share them, but the wise man has no difficulty in freeing himself from them. Marriage and paternity bring so many cares that it is more prudent to avoid them. Lastly, natural appetites, when they become depraved, give rise to superfluous desires. We long for wealth, power, rank, fame, and we aspire to reform men and to rule the state; as if true riches were not the suppression of cupidity, and as if man had not enough to do in governing himself.

"I never had any ambition to please the people, for the things that I am concerned to know, they dislike; and what they like, I know not" (*ap. Sen. Ep. XXIX, 10*).

Since the pursuit of pleasure is the supreme law, virtue has, in itself, no worth. The good and the beautiful are nothing without the useful and the agreeable. *Apart from pleasure all the virtues taken together are not worth a brass couater* (Plut. *Adv. Col. Ch. 30*).

Nevertheless, just as the art of medicine is practised, not for its own sake, but for the good health which it procures, so we must practise virtue not for itself, but because of the happiness which it alone can insure to us. It is prudence that teaches us to discern the true and the false goods, while temperance makes us resist the assaults of apparent pleasures, and attain the supreme delight. And if this virtue is good, it is not because it purifies the mind, but because it secures for us more lasting joys. It is the same with courage, which makes us bear present pain and procures more precious goods in the future; and with justice, which is a refined form of egoism, a mere convention, by which we agree not to attack our fellow creatures, in order thereby to avoid violence on their part. There is nothing mysterious in the legal right:

it is founded on egoistic calculation, and if it has a sacred character it is on account of its utility. The moment a law loses its utility it loses its title to respect, in fact it ceases to exist.

The desire for absolute calm, for repose and silence, lassitude and disgust with every kind of pleasure, are the prevailing note in the Epicurean philosophy. Never was an ethical system less voluptuous and more melancholy than this ascetic sensualism. *Nihil admirari*, not to be interested in, or drawn to anything, to retire altogether into one's self, to play as small a part in life as possible, this is true wisdom, this is the only road to happiness. The ideal would even seem to be to reduce one's whole being, one's whole life, into a point in space and time, so as to leave to pain no hold or purchase.

Antecedents of Stoicism.—The Cynics ; Gospel of toil (πόνος). Pyrrho ; Absolute Indifference.

The Cynic school is a link between the moral doctrine of Socrates and that of Zeno. Antisthenes was a disciple of Socrates, Crates the Cynic was to be the master of Zeno. But Antisthenes was not a faithful disciple, for he simplified and impoverished the doctrines of Socrates. He separated Ethics from Metaphysics, virtue from knowledge; the good, the sole object of his philosophy, he regards as a matter of practice and not of speculation or fine words. Virtue, with the Cynics, no longer depends on the intellect, but on the will; it is moral strength, or self-control, and thus it lies in action, in victorious contest. The Cynics offer, in opposition to the prejudices of ancient Greece, the apologia of toil and labour. The model they set up was Hercules, "the only Greek hero whose exploits took the form of labours" (Michelet).

Thus Cynicism, which has become synonymous with an ethics of shamelessness, was in reality a form of asceticism, its main principle being that pleasure is an evil, pain a good.

But there is, in the teaching of the Cynics, a startling discordance between their lofty premisses and the frequently low and coarse nature of their conclusions. To the Cynics belongs the honour of having laid down the principles out of which Stoicism arose, but their interpretation of these principles was often contrary to all morality. Thus they threw

away the merit of the great conception that there is no good but virtue and no evil but vice, and made good fame (*εὐδοξία*) "the prating of fools" (Epictetus, *Discourses*, Bk. I, Chap. 24). In the same way, in the contempt for wealth which they professed, they did not confine themselves to praising temperance, but made this contempt the apologia of poverty and a life of mendicancy (see Xenophon's *Symposium*).

While the cynic sage soars over the prejudices of the state and regards the master and the slave as equals, he fails, owing to another prejudice, to recognize the obligations of the citizen. He flouts our first duty to our country, which is to defend it. In derision Diogenes rolls his tub about in Corinth when it was besieged. When asked which is his country, he replies, "I am a citizen of the world" (*κοσμοπολίτης ἔφη*, Diog. L. VI, 63). Finally, in his anxiety to be independent and self-sufficing the Cynic takes care not to burden himself with a family, and regards marriage as a state of slavery.

What made these paradoxical doctrines dangerous was that they were presented in the living form of preaching and example. Zeller calls the Cynics the "Capuchin friars of antiquity." They were indeed mendicant preachers, and, enforcing their precepts by example, carried out all their own maxims, not excepting the most coarse and shameless. They said of themselves that they were like the choir masters who sing a note loudly in order to give it to their pupils. Their originality lay in their method of teaching, and this also was their title to fame. Diogenes, for instance, is still "one of the most popular figures of ancient Greece" (Zeller).

Another strikingly original personality was that of Pyrrho, who may be given a place between Antisthenes and Zeno. He had followed the army of Alexander, and appears to have been much struck by the Indian mystics. Pyrrho despised logic and science only because he held them to be of no profit to the soul. His scepticism was linked with his ethical views, being in his opinion a means of attaining virtue. "To turn doubt into an instrument of wisdom, of moderation, firmness, and happiness, such was Pyrrho's novel conception, the leading idea in his system" (Waddington, *Étude sur Pyrrhon*). No doubt if we were persuaded that there is for us in life neither

good nor evil we should indeed become "indifferent to all things," and be spared the humiliation of superfluous desires and miserable fears. But Pyrrho omitted to draw the distinction made later by the Stoics between false goods (wealth, honour, etc.), which they, too, treated with indifference, and the only true good, which is virtue. "He used to say that nothing was honourable or disgraceful, just or unjust. And on the same principle, he asserted that there was no such thing as downright truth; but that men did everything in consequence of custom and law. 'For that nothing was more this thing than that' (D.L. IX).

Pyrrho not only renounced happiness, but did not even believe in practical virtue. Indifference, which frees us from all passion, all desire, he held to be wisdom itself. We see in him a disillusioned man, a Greek turned ascetic.

The Stoics: Nature and Will; καθήκον and κατόρθωμα; Private Morality; Wisdom; Social Morality; Natural Law; Cosmopolitanism; Religious Morality; Piety and Resignation.

The maxim which the Stoics adopted sums up the ethics of Cynicism: "All that is natural is good" (Ravaisson), and man has only to live in conformity with nature: ζῆν ὁμολογουμένως τῇ φύσει. They distinguished, however, two kinds of lives, one of which is according to nature, and the other according to reason; but these two are, and ought to be interdependent and at one with each other. Life according to nature is based, not as Epicurus taught, on pleasure, but on a fundamental instinct from which pleasure takes its rise, which is the love of a being for itself. In the Stoic physics, animals, plants, and organic bodies, severally form a whole composed of material parts, and bound together by a force (συστασις, *constitutio*).

The acts by means of which a being maintains its constitution are its *functions* (καθήκοντα, *officia*), not virtues, but duties. The function, or καθήκον is merely an instinctive act which corresponds with the needs of a being, and thus serves the ends of Nature. In itself it is neither good nor bad; it is morally indifferent. To become a virtuous act (κατόρθωμα) it needs to be accomplished by reason of, and with a view to the good. There is a whole class of things which are not connected

with morality, and are hence indifferent (*ἀδιάφορα, indifferentia*). Such are, for example, health and riches. Still, as they assist in the conservation or in the development of a being, they are useful things, advantages (*commoda*) if not actually goods, and preferable (*προηγμένα, potiora*) to sickness and poverty, which are themselves not evils but inconveniences (*incommoda*) not preferable and to be avoided. To sum up: life according to nature, which is merely the sensible life common to men and animals, already admits of regularity and order, but the performance of functions which is its law is spontaneous and instinctive.

What then does this life according to nature need in order to have moral value? That it be ruled not merely by instinct, but by free will and reason. Let the order amongst the functions be desired, respected, and maintained by man himself, and there will then be room for merit and virtue. It is when human life, instead of being the product of a natural spontaneity becomes "a work of art" (Ravaisson) that morality appears. In other words, conduct that is merely in conformity with nature or order, and is not regulated *with a view* to order, cannot be called virtuous. No doubt virtue must have, as Kant would say, a *matter*, and this it finds in the natural functions; but virtue proper lies in the *form*, that is, in the will which, stretching over (*τόνος*) all our acts, constitutes their unity and their harmony, as the divine force which extends throughout all the elements constitutes the living unity of the universe. The formalism that separates virtue and vice from the actions in which they express themselves, was professed by Ariston of Chios alone, and in this he breaks away from the Stoic orthodoxy.

It is true that, with the Stoics, to live according to reason was to live according to nature, but the principle of this life in agreement with nature is choice, free will, not a blind and natural instinct. Hence this school had a double tendency; sometimes it was with the will, with the harmony with one's self, that they were concerned, and then indifference was exaggerated to the point of Cynicism (e.g. in the paradoxes: "All error was equally bad; *Who is not wise is mad, etc."). At other times they approached the Peripatetic doctrine, as in their theory of *καθήκοντα* and *προηγμένα*.

And now, what was the practical morality of the Stoics? Let us first consider it as it appears in the individual. The virtue that regulates our conduct, as regards our passions was by the Stoics called not temperance, but *apathy* (*ἀπάθεια*). For with them passion was not a natural appetite, legitimate when restrained, but "a movement of the mind which is irrational and contrary to nature." *Aversa a recta ratione, contra naturam animi commotio* (Cic. *Tusc.* IV, 6).

Passion cannot have its source in nature, from which only good can flow; it is therefore reason, but reason ill regulated and corrupted. Being an act of reason, it is a kind of judgment, a wrong opinion. It arises in us out of ignorance of the good; for if we were imbued with the thought that happiness is in virtue alone, we should be insensible to wealth, to honours, to all those false goods which ordinarily are the object of our desires. In order to free ourselves from our passions we have then only to correct our judgments. Let our mind refuse its consent (*συγκατάθεσις*, *assensio*) to those flattering images which stimulate our lust, and the guilty desires will then be suppressed. But are we to close our hearts to every kind of feeling? No, we must not understand the Stoics literally when they speak of insensibility, *ἀπάθεια*. Although they condemn pleasure, sadness, desire, and fear (*laetitia*, *aegritudo*, *libido*, *metus*) (Cic. *Tusc.* IV, 6), all of which disturb the mind, still they allow that, by a fortunate compensation, joy, foresight, and will (*gaudium*, *cautio*, *voluntas*), which do not deprive the mind of peace and strength (*constantia*), may have a place in the heart of the sage.

"Do you ask wherein to lay the foundation [of a happy life]? Take no pleasure in vanities. . . . You think that I deprive you of many pleasures when I take away from you all fortuitous things, and advise you not to indulge even hope itself, the sweetest of all delights; on the contrary, I assure you I would have you always enjoy pleasure, but I would have it originate at home. . . . Other enjoyments affect not the mind, they only smooth the brow . . . unless perhaps you think a man enjoys pleasure because he laughs. . . . Believe me, true joy is a serious thing" (Seneca, *Epistle XXIII*).

So understood, apathy includes all the private virtues. Courage is a form of apathy, and may be defined as an undisturbed attitude in the face of danger, sickness, and death.

The freedom and independence which the Stoics claim for the sage must belong to a mind that has become insensible to the favour of fortune, and of men. In short, to have reached perfect apathy is also to possess wisdom, upon which it is founded. The sole object of wisdom is not, however, to regulate our affections by showing us the goods on which exclusively to fasten our desires. Wisdom is defined by the Stoics as the knowledge of things human and divine, by which we are to understand the knowledge of the universal order established by divine reason, to which the moral law demands that we conform our will. It is more especially the knowledge of duty. All moral activity flows from wisdom; and the Stoics who did not separate action from knowledge, or will from reason, naturally attribute every perfection to the sage. For by wisdom they meant right reason joined to a good will, and there is no virtue that does not belong to wisdom when thus defined.

The Stoic sage being, like God, self-sufficing, ought, one would think, to retire from society, since he regards it as one of those indifferent things in which his virtue is not concerned. But, on the other hand, his activity is extended by social life, which consequently widens the sphere of his duties, and affords him the opportunity of practising justice. Hence he will feel the obligation to give a place in his soul to the social virtues. The principle upon which society and justice rest is law. Law has its source in nature, not in opinion or custom (Cic. *De Leg.* I, xiv). There is a supreme law which has existed from all ages, before any legislative enactments were drawn up in writing (*Ibid.* Ch. VI). And infractions of this law are punished by the torments of remorse, symbolically represented by the *Furies* of the myths (*Ibid.* Ch. XIV).

Natural law emanates from divine reason, or rather is divine reason itself taking the form of a command. Chrysippus defines it as "the highest reason implanted in nature which prescribes those things which ought to be done and forbids the contrary. *Lex est ratio summa, insita in natura, quae jubet ea quae facienda sunt, prohibetque contraria* (*De Leg.* I, vi).

Religious morality is the consummation of social morality. Every rational being participates in the divine life. In

virtue of their reason all men are of the family of the gods : *ut homines deorum agnatione et gente teneantur* (*De Leg.* I, vii), and in this common origin they find the first cause of their unity and mutual love.

There exists a natural society, consisting of rational beings, which stands in the same contrast to civil society, as does the divine law to the human. This society recognizes neither Greeks nor barbarians, neither strangers nor enemies, neither masters nor slaves, but grants the rights of the state, without distinction, to all those who participate in reason. Nay more, reason circulates through the universe, extends to all beings ; hence the state which is governed by reason is identified with the world, and justice is the law that expresses the order of things. From these lofty conceptions springs philanthropy, or the love of the human race, a virtue hitherto unknown, and revealed to the world for the first time by the Stoics. Cicero uses the Christian expression 'charity' (*Caritas generis humani*). And Seneca says : "Wherever there is a man there is occasion for a good deed" (*Sen. Ep.* XXIV, 3). The Stoics substituted universal brotherhood for the patriotism which had been ruined and deprived of its object when the smaller states disappeared in the empires of Alexander and Rome. Their cosmopolitanism did not prevent them from being law-abiding citizens. The laws of the state are a reflection of natural and divine law. *Veri juris germanaeque justitiae solidam et expressam effigiem nullam tenemus, umbra et imaginibus utimur. Eas ipsas utinam sequeremur !* (*De Off.* III, XVII). So long as reason governs, or even makes its voice heard in the state, the Stoic wise man is glad to take his place and live in it ; he accepts his share of public offices and performs his duty as a citizen.

The Stoic formulæ of virtue can easily be transformed into pious maxims. To live according to nature, to obey the law, what is this but to honour the God invoked by Cleanthes in these terms : "O Lord of Nature, Thou who governest all things with law ; O Jupiter, Hail !"

Thus morality leads up to religion, and piety was made the goal of virtue not only by Epictetus or Antoninus, but also by one of the founders of Stoicism. The religious worship of the Stoics was primarily homage to the Sovereign Reason.

"Thee, O Jupiter, it is lawful for all mortals to address. . . . Therefore I will forever sing Thee and celebrate Thy power. All this universe rolling round the earth obeys Thee, and follows willingly at Thy command. Such a minister hast Thou in Thy, invincible hands, the two-edged, flaming, vivid thunderbolt. . . . By it dost Thou control that common reason which circulates through all things, and which is in the great and in the smaller lights of heaven. Such, Thou King Supreme, is thy mighty rule o'er all things" (*Hymn of Cleanthes*, trans. by Sir Alex. Grant).

Knowledge of the order established by God in the world inclines our will to conform to it. * For this order is necessary. The facts of Nature, the events of history, form an indissoluble chain whose links were rivetted by Fate, and which chance cannot break. *Ducunt volentem fata, nolentem trahunt* (Sen. *Trag.*). But God does not only constrain us by force, He also persuades us by reason. The reign of necessity is at the same time the triumph of justice, and destiny does the work of Providence. So that, while it would be merely unreasonable not to accept the inflexible law of Fate, it would be impious and sacrilegious to oppose, if even only by an impotent will, the wise decrees of Providence. *Deo parere libertas est* (Sen. *De Vita beata*). To be pious is to will what God wills, because we know not only that His will is always accomplished, but also that it is always worthy to be accomplished.

"O King, most high, nothing is done without Thee either in heaven or on earth, or in the sea, except what the wicked do in their foolishness. Thou makest order out of disorder, and what is worthless becomes precious in Thy sight; for Thou hast fitted together good and evil into one, and hast established one law that exists for ever. But the wicked fly from Thy law, unhappy ones, and though they desire to possess what is good, yet they see not, neither do they hear, the universal law of God" (*Hymn of Cleanthes*).

The Stoics, however, far from treating virtue as subordinate to piety, regard the fear even of the gods as contemptible when it takes in the soul the place of the desire for the good. Thus religion with them is primarily devotion to duty. Since justice reigns, the immortality of the soul is a matter of indifference. "No," says Chrysippus, "it is not through the fear of the gods that we should try to dissuade men from acting unjustly. All this talk about divine vengeance is open to discussion, and involves many difficulties. It is very like

the stories about Acco and Alphito, by which women prevent little children from doing wrong."

The Stoics' attitude with regard to the popular religion is a further proof of the ethical nature of their faith. They would disturb none of the things that help to preserve morality. The Stoics used the mythological legends in the same way as Christianity utilized the pagan temples: they made them serve their faith. But while they converted ancient religion into an ethical symbolism, the Stoics were not the belated apologists of paganism, but, to say the least, the promoters of a new religion which we have already defined as the "cult of duty."

• *Epicureanism in Rome; Lucretius. Roman Stoicism; Cicero's Eclecticism; Seneca; Direction of Conscience.*

In their philosophy the Romans lacked originality, but not in their morality. No doubt their ethical doctrines were borrowed from Greece. But, as is always the case, these doctrines became modified by contact with the habits and customs which they were intended to influence. Epicureanism and Stoicism could only be adopted in Rome by becoming Roman.

• Lucretius believed himself to be the respectful disciple, the faithful expounder of Epicurean teaching; but, as has been noticed, Epicureanism with him takes a strong "Roman tinge," becomes "vile, and assumes a stern, haughty, imperious tone" (Martha). The precepts of Epicurus as uttered by him take at any rate a fresh accent. • Love, ambition, fill him with a kind of terror unknown to Epicurus. The Athenian sage found within himself the best remedy for his passions, namely disenchantment. But Lucretius has none of this calm reasonableness; of love he gives a terrifying picture, describing it in the same words as the plague and other scourges (St. Beuve). But even while lifting his voice with all the moralist's burning zeal against this blameworthy passion, he portrays it so truly and so forcibly, he renders so well the emotion belonging to it, that it has been thought he must himself have suffered from the evils he describes. The Epicurean ethics were calculated to attract minds that were either unusually refined or unusually indolent. And so in Rome, with the exception of the sage and prudent Atticus, it had none but

unworthy votaries, who borrowed its name to cover their vices (e.g. Gabinius, Piso, and Caesar). Epicureanism was repugnant to the Roman temperament, for the Romans were Stoics before the letter, and as philosophers they became Stoics after the spirit.

Cicero was as remarkable for his fluctuations between different schools as Lucretius for the firmness with which he adhered to one. We cannot say of Cicero that he was a Stoic, but only that he was inclined to Stoicism. He was a learned historian of philosophy, rather than a philosopher. He defended and seemed to adopt different systems in turn, just as he might in his capacity of a conscientious and honest advocate plead various causes provided they were honourable. Thus he is a Stoic in the *De Officiis*, which is practically a translation, and in the *Tusculans*; he is a Peripatetic, and the opponent of Epicureanism in the *De Finibus*; and he is an Academic throughout all his writings. Cicero's contribution to philosophy has no unity beyond that derived from his own personality. His writings reveal an upright and elevated mind, devoted to law and justice, and careful of the interests of his Roman fatherland. He gives evidence of an upright and steadfast conscience; in the first place, by the manner in which he deals with the subtle and often treacherous art of casuistry. He denounces all legal frauds, bad faith in the making of contracts, intrigues for obtaining legacies. He lays down the principles of the law of nations, of generosity to the conquered, and observance of treaties (*De Officiis*). Again he proves himself a subtle moralist when he points out the rules of decorum, and defines those pleasing obligations of good breeding which are part of an exquisite politeness, and matters rather of good taste than of conscience. But his is above all a generous mind, whose sympathy naturally inclines to the noblest doctrines; hence he speaks with equal admiration of Zeno and of Aristotle, and considers indeed that they differ only in the language they use: *Sentit idem Zeno quod Xenocrates, quod Aristoteles, loquitur alio modo* (*De Leg.* I, 21).

Why is he so violent in his attack on Epicureanism? It is because this doctrine lowers the ethical ideal, because it would relieve man of his duties as a citizen, as of a heavy

burden, and this is offensive to Cicero's patriotic feelings. He even becomes intolerant when dealing with Epicurus. "It is not a philosopher that is needed to refute this language, but a censor to condemn it."

Whilst philosophy is for Cicero the occupation of a cultured leisure (*liberale otium*), Seneca looks upon it as a profession; its object for him is, not to give intellectual pleasure (*oblectamentum*), but to cure souls (*remedium*: *Epist.* CXVII, 33); he preaches philosophy with an ardour that aims less at dogma than at precept.

"... Here is no room for jesting. You are called upon to succour the distressed; you are under an obligation to lend all possible assistance to the shipwrecked, to the prisoner, to the sick, to the poor and needy, and to the unhappy under sentence of death" (*Epist.* XLVIII).

He never loses sight of the conversion and the salvation of souls. The *Treatise on Clemency*, dedicated to Nero, the *Consolations to Helvia*, *Marcia*, and *Polybius*, are works of direct moral advice. The *Letters to Lucilius* are a veritable treatise on moral direction. The philosopher is seen grappling with all the diseases of the soul: weariness, hardness, the fashionable levity which scoffs at virtue and at philosophers: "He may make me laugh, but perhaps I shall make him weep" (*Epist.* XXIX, 7).

Side by side with the director of conscience there is in Seneca the casuist—witness his justification of the murder of Agrippina, and his personal apologia in the *De Vita Beata*. He came from Spain, the country of casuistry. But what strikes us most in him, is that he is much more deeply imbued than Cicero with the humanitarian principles of the Stoics. In slaves, he sees, not merely 'servants hired in perpetuity' (*De Off.* I, 13), but "friends of humble estate" (*Epist.* XLVII). They are slaves, but, above all, they are men. Cicero was not above calling the gladiatorial games a school for courage: "When it is the guilty that fight, we might by our ears perhaps, but certainly by our eyes we could not, have better training to harden us against pain or death" (*Tusc.* II, 17). Seneca, on the contrary, does not wish the people to be taught cruelty: "This man has committed a theft; what then, he deserves to be hanged: another slew a man; it is but just he be slain himself. And what hast thou

deserved, oh wretch, who canst take delight in this horrid spectacle?" (*Epist.* VII).

While they condemned pity, the Stoics nevertheless held that the principle of assisting the poor is founded on natural right. In this way they connected charity with justice, and they represent both as a strict obligation. "Why," says Seneca to the rich man, "are you so sparing of your property as though it were your own? You have but the management of it" (*De Benef.* VI, 3). There is an element of socialism in the Stoic ethics; they do not admit that the rights of property can be pleaded as exempting us from the duty of alms-giving. It is by the insight and courage he shows in his opinions that Seneca appeals to us; his ethical teaching proves that a veritable revolution had taken place in the minds of men.

Epictetus. Marcus Aurelius; Pious Resignation.

Seneca writes for his friend Lucilius, for his mother Helvia, for his pupil Nero; Epictetus, on the other hand, lectures in public and addresses the people. This fact in itself shows the development of ethical preaching in Rome. Philosophy had now become a profession (*Discourses*, I, 4) or rather a mission and priestly function. The conception which Epictetus formed of it was so elevated, that he enjoins those who exercise this function to have neither wife nor child, to give up public life, in a word, to sacrifice all, for the sake of the unique privilege of being an instructor of the human race (*Discourses*, III, 22).

In thus assuming the direction of men's consciences, Philosophy undertook at the same time the office of consulting their needs, and responding to their aspirations. So Epictetus, himself doubly a slave, having as master Epaphroditus and as Emperor Domitian, holds out to mankind, oppressed by the yoke of the Cæsars, the proud consolation that despotism has no power over the liberty of the soul.

"Whether then have you nothing," asks the philosopher of his disciple, "which is in your own power, which depends on your self only and cannot be taken from you, or have you anything of the kind?—I know not.—Is any man able to make you assent to that which is false?—No man.—Can a man force you to desire to move towards that to which you do not choose?—He can, for when he threatens me with death or bonds, he compels me to desire to move towards it.—If then you despise death and

bonds; do you still pay any regard to him?—No.—Is then the despising of death an act of your own, or is it not yours?—It is my act" (*Discourses*, IV, 1, trans. by Long).

True liberty consists in controlling our thoughts and desires, in defending ourselves against external evils, entrenched in the impregnable fortress of the will. Some things depend upon ourselves, others do not. (*τὰ ἐφ' ἡμῖν, τὰ οὐκ ἐφ' ἡμῖν*, *Manuel*, I.) What depends on ourselves is our thought, whereas health, wealth, and all external advantages, are things we have no control over. Let us only cling to what depends on ourselves, and nothing can affect us. Liberty of mind is our most precious possession, not only because it frees us from all the evils created by opinion, but also because it is one with reason (*τὸ ἡγεμονικόν*), that divine part of the soul, and therefore our dignity (*ἀξίωμα*) rests on it. We should not hesitate even to sacrifice our lives, in order to maintain this freedom intact.

If we find it hard to renounce all the supposed joys of life, if we persist in looking upon sickness, poverty, and death, as evils, it is because we do not remember that what seems to us the caprice of fortune is part of the scheme of a wise Providence leading all things by necessary means to the good. Epictetus' doctrine of resignation loses its austerity as it passes into respect for the Divine Will, faith in Providence, in short, a pious submission: he does his duty and leaves the rest to the gods.

"For what else can I do, a lame old man, than sing hymns to God? If I were a nightingale, I would do the part of a nightingale. If I were a swan, I would do it like a swan. But now I am a rational creature and I ought to praise God: this is my work; I do it, nor will I desert this post, so long as I am allowed to keep it; and I exhort you to join in the same song" (*Discourses*, I, XIII).

Epictetus sums up his moral doctrine in this brief and negative formula: "Endure and abstain" (*ἀνέχου καὶ ἀπέχου*). Marcus Aurelius, also, but more plaintively, proclaims the impotency of man. The world pursues its invariable course, and we can change nothing of its laws. Yet is our destiny linked to that of the world; and carried along as we are by the current of things, we can only exclaim: "I am in harmony with all that is a part of thy harmony, Great Universe!" (*Medit.* IV, 23).

The whole of virtue lies in resignation, and we do not even know that this resignation is of a pious nature, for it may be submission to a blind necessity, and not to a divine goodness. In vain does Marcus Aurelius say, "All that happens, happens aright" (*Medit.* IV, 9). Doubt still lingers in his mind: "The world is either a confused mingling of elements which combine and disperse, or a unity of order and Providence" (*Medit.* VI, 10). He concludes, it is true, that in neither case has the sage anything to fear. Nor is he much more successful in his vindication of social duties. "What strikes one most in Marcus Aurelius is, no doubt, his conception of the unity of the world, the close connection between all its parts, and the consequent obligation upon all men, as members of one body, to live each for the other" (Ravaisson). But, according to him, the ideal which philosophers treat of is very far removed from the reality of things. We have to resign ourselves to the injustice of men: "Protest till you burst: men will go on just the same" (*Medit.* VIII, 4).

One thing alone can console us for the evil done to us, and that is the selfish reflection that we are not sullied thereby. "Say men kill you, quarter you, pursue you with execrations, what has that to do with your understanding remaining pure, lucid, temperate, just?" (*Medit.* VIII, 50).

Marcus Aurelius does not hate men—they are wicked and should be pitied; but if he can be said to love them, it is with a love that knows no illusion and feels itself to be powerless.

Neo-Platonism: Mystical Ethics; The Return to God; Practical Virtues.

The Alexandrians were disciples of both Aristotle and Plato, but they introduced into their ethics an element which was foreign to the Greek spirit, namely, the contempt for action traditional in the East, which naturally asserted itself, more especially at a period of oppression and civil disturbances, such as the beginning of the third century. It is when a life of action is closed to them that men take refuge in the contemplative life. Having no fatherland on earth, they seek to found one above, and this is the sense in which we must understand these words of Plotinus:

"Let us fly to our dear, our true fatherland. . . . Our fatherland is there whence we came, and there, too, is our father. Our feet are powerless to carry us thither; they can bear us only from end to end of the earth. Nor will ships serve our need, nor chariots drawn by swift horses. Let us leave such vain means aside for seeing our dear fatherland again; we have but to close our bodily eyes and open the eyes of the spirit" (*Enneads* I, VI, 8).

The ethical doctrine of the Alexandrians was mystical, like all their philosophy. Evil, they taught, comes to the soul, in the first place, from its having been born into an individual life, whereby it was separated from the soul of the universe. For in its ethical sense the *procession* (*πρόοδος*) of the Alexandrians is a fall. Again, evil for man is, above all, to love himself as an imperfect and finite being and to be content with his state of degradation; while the good is the emancipation of the soul from the sensible world, her withdrawal into herself, her return towards the universal soul, towards intelligence, towards the One. Conversion, or the turning of the soul to God, culminates in union with God, or ecstasy, which is the perfect good.

Moral life is therefore a continuous progress towards perfection, an unceasing effort to reach God. The virtues belonging to it mark the degrees in this ascent of the soul, which is called conversion. They proceed one from another, and are developed in dialectic order in the succession of time. The lowest virtues, which mark the first stage in moral life, are the practical ones: prudence, courage, temperance, justice. These have scarcely more than a negative value; they purify the soul, draw it away from evil and save it from sin; they bring it to the threshold of Divine Life, but do not cause it to enter therein. They are like the virtues of Hercules, by which he desired to pass from earth to heaven, but are not yet the virtues of the Gods themselves. They are not the goal, but they are the steps leading to it.

In the contemplative life, to which the practical virtues are the means of approach, there are also various stages. The object of contemplation is the Beautiful. But there are two kinds of beauty: sensible beauty, which is the triumph of form over matter, and moral beauty, which is the triumph of intellect over the passions and senses. Contrasting one with

the other Plotinus said: "The face of Justice is more beautiful than the evening Star." The different contemplative virtues correspond to the different degrees in beauty. While thought, as pure activity, was regarded by Aristotle as self-sufficing, it was, for the Alexandrians, a movement towards an end. Thought tries to get beyond itself, it rises above beauty in its endeavour to reach an object which is outside and above itself, namely, the Good. Beauty gives rise to love, but it is not the principle of love. What renders beauty admirable is the Good that shines through it; that is the reason, said Plotinus, why the face of a man alive is more beautiful than the face of one dead, and a living animal is more beautiful than an animal in a picture, even if the latter possesses a more perfect form.

Contemplation is, therefore, an endless moving towards God; it does not bring us into the divine life, but prepares us for it, and leads us thither. We cannot unite ourselves to the Good, we can only deserve, by our virtues, that it should unite itself to us. We can only keep our eyes fixed on the horizon (which was the symbol of contemplation) waiting for the sun (the symbol of the Good) to rise above the ocean. Plotinus, continuing this metaphor, represents thought as the wave, on which we are lifted up and carried along.

Thus all the practical and contemplative virtues are no more than the initiation into the divine life; their goal and their reward is ecstasy, or union with God. In contemplation the soul is still distinguished from her object, in ecstasy she becomes one with it.

"They who know nothing of this higher state," says Plotinus, "may gain some conception of it from the love known to us here below, when we love passionately and attain that which we love. But the love of this world has for its object nought but mortal things and shadows. True love is found only above . . . there nothing remains but that which loves and that which is loved, and these are no longer two, together they make but one" (*Enneads*, VI, IX, 9).

There are no words in which to describe ecstasy, because ecstasy transcends reason. It is arrived at, says Porphyry, "by the suspension of all the intellectual faculties, by repose and the annihilation of thought. As the soul learns to know sleep when slumbering, so it is in ecstasy or the annihilation of all the

faculties of her being, that she knows that which is above existence and above truth" (Porphy. *Sent.* Art. 26). In Ecstasy is perfect happiness; but this happiness which fills the soul to overflowing lasts but for one instant; it is part of its nature to elude consciousness. "Those reflections which sometimes accompany our actions, far from making them more perfect only enfeeble them, and diminish their intensity." Such then is the supreme Good, a gift of God rather than the fruit of virtue; it is fleeting, nay more, it is unfelt.

General Character of Ancient Ethics: The Notion of Duty.

* The distinctive character of ancient ethics was the identification of happiness and virtue; the end set before man was always that Supreme Good in which, even here below, these two objects were to be reconciled, and to become one. The notion of duty, in the stricter sense of the word, is a modern one, though it was not altogether unknown to the ancients; but Kant was the first to emphasise this idea, and to found the whole of morality upon it. Plato and Aristotle speak continually of the Good (*ταγαθόν*), and of virtue; but we do not find in their works any expression that corresponds to what we call duty. The terms (*τὸ ὀφελον, το δέον*) which come nearest to expressing this conception, are rarely met with in the exact sense which we give to the word duty.

At a very early period, however, the Greeks had formed the conception of a moral law, which commands and forbids like the civil laws, but differs from these in that it is unwritten. Socrates energetically upholds, in opposition to the Sophist Hippias, the doctrine of unwritten laws (*νόμοι ἄγραφοι*); and this notion must have been already familiar, since Sophocles put it into the mouth of Antigone in the play. In the *Crito*, Plato expresses the idea of absolute obligation which is inherent to the moral law. "Neither injury nor retaliation, nor warding off evil by evil is ever right." But as a rule, Plato seeks the good and the beautiful rather than the obligatory, and this characteristic is even more striking in Aristotle.

The Stoics, like Plato and Aristotle, aimed especially at determining the nature of the good. It was always with the notions of the good and of virtue, that they concerned themselves. Still, the distinction they made between *καθῆκον* and

κατόρθωμα, brought them very near to the modern notion of duty. The *καθήκον*, as we have seen, expresses every appropriate action, or in other words, every action for which one can give some plausible, natural reason; as, for example, reasons of utility or of sentiment, such as the care of one's health, of children, etc. A higher degree of wisdom or of virtue, constitutes the *κατόρθωμα* (*Officia perfecta*, or strictly, *perfectum*), which consists in doing the *καθήκοντα*, but in a different spirit, namely, as things good in themselves and in harmony with the universal order. Of all the expressions therefore, in the ethical terminology of the ancients, *κατόρθωμα* is the one that corresponds most closely with our idea of absolute duty. Still, we must remember that *κατόρθωμα* indicates the ideal perfection of human wisdom rather than the notion of obligation in itself.

To sum up: the leading idea in ancient ethics is that of the Supreme Good, that is, of the harmonious union of virtue and happiness in the soul of the wise man.

CHAPTER II

THE ETHICAL PROBLEM IN MODERN TIMES

Christian Morality: Faith, Hope, and Charity.

All the pagan philosophers endeavoured to find the principle of human morality in the intellect: Plato and Aristotle, Epicurus and the Stoics, even the Sceptics and the Alexandrian Mystics all regarded the Supreme Good as the reward of wisdom. But according to Christian teaching, the mainspring of the moral life is not the intellect but the heart. Love is the supreme principle in practical life: love brings with it happiness and virtue, and every other good.

In the first place, faith is now substituted for knowledge. Faith is an act of the will as well as a conviction, or mental act. It is an act of self-surrender, of loving and trustful submission to the word of God; and to His will. The Christian dies according to the flesh that he may live anew according to the spirit.

The first effect of faith is a spiritual second birth (παλιγγενεσία, *Titus*, III, 5). The spirit dwells in regenerated man. "The fruit of the Spirit is love, joy, peace, long-suffering, kindness, goodness, faithfulness" (*Gal.* V, 22): all the Christian virtues. The greatest of the virtues, the principle of all the others, which is both derived from and contained in faith, for it is the fulfilment of the law, is charity. πλήρωμα νόμου ἡ ἀγάπη (*Rom.* XIII, 10) "Faith worketh by love" (*Gal.* V, 6): and charity manifests itself by good works. Charity includes the love of God and the love of our neighbour as a necessary consequence of the love of God. "Beloved, let us love one another: for love is of God; and every one that loveth is begotten of God, and knoweth God. He that loveth not knoweth not God; for God is love. Herein was the love

of God manifested in us, that God hath sent His only begotten Son into the world, that we might live through Him. . . . Beloved, if God so loved us, we also ought to love one another. . . . If we love one another, God abideth in us, and His love is perfected in us" (1 *John*, V, 7-12).

Love is to Christians what wisdom was to the ancients, the principle, that is to say, of all the virtues.

"Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith so that I did remove mountains and have not charity, I am nothing. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing. Charity suffereth long, and is kind; charity envieth not . . . beareth all things, hopeth all things, endureth all things" (1 *Cor.* XIII, 1-7).

We have seen that the Stoics had formed a conception of the brotherhood of man (*Caritas generis humani*); all men, in virtue of reason present in them, were sons of God. But the charity of the Stoics was a rational sentiment, the result of reflection, and of the consciousness of human dignity. Christian charity is deeper, more ardent. It is also derivative and indirect; for man by his nature is degenerate and corrupt, and our love for one another is only a consequence of the love which God bears to us; it is to please God, to unite ourselves in intention with Him that we should love our neighbour. Charity consists in desiring the moral good, the perfection of our neighbour, and in the alleviation of his woes. Towards the guilty it is shown in forgiveness and pity.

"He that is without sin among you, let him first cast a stone at her" (*John*, VIII, 7). "Father, forgive them; for they know not what they do."

In accordance with this new morality, there arose a new conception of the Supreme Good, of the good, that is, in which happiness and virtue are united. All the ancients had admitted a relation of identity between virtue and happiness. For Socrates and Plato, for Aristotle and Zeno, to possess virtue is to possess happiness; while Epicurus holds that he who is happy is virtuous. But the Christian conception is quite different. Virtue is Charity; in other words, it is the love of God, and the love of man in God and for God. Happiness is the possession of God. It is true that to love

God is to possess Him to a certain extent, and to be loved by Him, but it is not to possess Him fully, and love tends towards a perfect union. Virtue, though it deserves happiness, is only the beginning of it, for the Supreme Good is not of this world; it is in another life that our destiny will be fulfilled. The faith that corresponds to this expectation, faith as belief in a Supreme Good that will in the future be real and necessary, takes the form of another virtue, namely, hope (*ἐλπίς*), which has for its object the bliss promised to the elect but not yet possessed by them. Faith, hope, and charity are the three great Christian virtues, and they are closely connected, inseparable indeed, since they all represent the same condition of the soul. But these virtues do not depend on the human will, because the condition that makes them possible implies Divine grace, and this we cannot give to ourselves. The Spirit bloweth where it listeth. We have already seen the difficulty which the Christian theologians had in reconciling the doctrines of free will and grace.

Mediaeval Ethics: Conscience; Synderesis and Conscientia.

In Ethics, as in the other branches of philosophy, the scholastic teachers sought no new principles. They adhered to the traditions of antiquity and of Christianity. But the practice of a religion in which the attention of the mind is constantly turned to itself, develops in the soul the sense of things spiritual. By looking into and examining their own minds during long hours of anxious and solitary introspection, the mediaeval theologians discovered conscience, of which they were the first to make an analysis. We find already, in the writings of Abelard, the part played by conscience in human morality clearly pointed out.

Christian morality is merely the natural law reformed (*reformatio legis naturalis, quam secutos esse philosophos constat* (*Theol. Chr.* II). Philosophers, like the gospel, made morality lie in the intention (*intentio animi*); and they rightly said that good men fly from evil through love of the good and not through fear of punishment. The Supreme Good in itself is God. Like Duns Scotus and Descartes later, Abelard makes the distinction between good and evil depend on the arbitrary will of God: *unde et ea, quae per se videntur pessima et ideo culpanda, cum iussione sunt dominica; constat itaque totam boni vel mali discretionem in divinae dispensationis placito consistere* (*Comm. in Ep. ad Rom.* II, 869, Migne's ed.).

The Supreme Good for man is the love of God, and the way to this good is virtue, which, by Abelard, is defined as good will grown into a fixed habit (*bona in habitum solidata voluntas*). It is not in the act itself, according to him, but in the intention that moral good or evil lies. The act itself is indifferent; even bad inclinations, which are the consequence of original sin, leave us innocent. It is the consent to evil that constitutes sin (*peccatum*).

"Non enim quae fiunt, sed quae animo fiunt pensat Deus, nec in opere, sed in intentione meritum operantis vel laus consistit" (Eth. 3).

"Opera omnia in se indifferentia, nec nisi pro intentione agentis vel bona vel mala dicenda sunt" (Eth. 7). But the intention depends on conscience, which distinguishes between good and evil. Man sins only when he acts contrary to his own conscience. But to be virtuous it is not enough to obey conscience; the latter must also be enlightened, and in agreement with the commands of the law. If conscience errs, the action is culpable, but less so than in a case where the action though conformable to the law is contrary to the injunctions of individual conscience. *Non est peccatum nisi contra conscientiam* (Eth. 13). *Qui persequabantur Christum vel suos, quos persequendos credebant, per operationem peccasse dicimus, qui tamen graviores culpam peccassent, si contra conscientiam eis parcerent* (Eth. 14).

Such was the truly elevated and novel doctrine of Abelard. The analysis of conscience was resumed later by Albertus Magnus. He makes a distinction between the faculty by which we discern good from evil, and what we may call the moral sentiment, or rather the moral disposition.

Conscience, properly so-called, is the law of reason (*lex mentis, lex rationis et intellectus*), by which we know what to do, and what to avoid. This faculty, inasmuch as it implies consciousness of the general principles of practical life, is innate and inamissible, but as the knowledge of particular duties it is acquired. *Lex mentis habitus naturalis est quantum ad principia, acquisitus quantum ad scita*.

From *Conscientia* he distinguishes the principle of moral activity, *Synderesis*. What is the origin and exact meaning of this term? We find it, for the first time in St. Jerome, but as Ueberweg says, it is possible that the word used by the scholastics was simply derived from a copyist's error, and that it should be read *συνείδησις*. However that may be, *Synderesis*, *scintilla conscientiae*, was distinguished by the scholastics from *Conscientia*, being, as it were, the original flame of which conscience is the actual radiance.

In the moral consciousness there is, then, firstly a mental act, the distinction of good from evil; secondly, a power inherent in man which has not been destroyed by original sin and which inclines us to the good and draws us away from evil. This is *Synderesis*, a remnant of Adam's first nature.

"In singulis viribus manet aliquid rectum quod in iudicando et appetendo concordat rectitudini primae in qua creatus est homo.— Synderesis est rectitudo manens in singulis viribus, concordans rectitudini primae (Albert. Summ. de Creaturis, p. II, qu. 89)."

According to St. Thomas, *Synderesis* is not a potentiality in the Aristotelian sense, but a natural possession of practical principles, just as intellect is a natural possession of speculative principles, *habitus quidam naturalis principiorum operabilium, sicut intellectus habitus est principiorum speculabilium, et non potentia aliqua (Summa theologiae I, q. 79, 12)*. Conscience is the act by which we apply our knowledge to our actions. *Conscientia actus est quo scientiam nostram ad ea quae agimus applicamus (Ibid. 13)*.

Here again *Synderesis* is the principle of *conscientia*. But St. Thomas conceives it in a more purely intellectual way than his master, Albertus Magnus. The moral philosophy of Thomas Aquinas is, in other respects, a combination of Christian and Aristotelian ethics. He distinguishes the practical from the contemplative life. He regards the four philosophical virtues, temperance, fortitude, wisdom, justice, as acquired virtues (*virtutes acquisitae*), which lead to natural happiness, while the theological virtues, faith, hope, and love, are divinely inspired (*virtutes infusae*) and lead to supernatural bliss. Our will is not compelled. It is subject to a moral necessity which does not destroy its freedom: our choice depends on ourselves. Here we have the notion of obligation, but St. Thomas hastens to add that we can do nothing of ourselves. We need the grace of God and His assistance even for the practice of the natural virtues, and still more if we are to share in perfect bliss, which is the vision of God (*Visio divinae essentiae*).

Mysticism sprang naturally from the depth and ardour of religious feeling in the Middle Ages. It was a reaction against the abuse of logical formalism, and then, as always, resolved itself into the placing of feeling above reason, and of immediate intuition above discursive thought. "The highest felicity," says St. Bernard, "is the mysterious flight of the soul

to heaven, the sweet return from the domain of the corporeal to the region of spirits, and fusion in God."

Hugo and Richard of St. Victor followed the pseudo-Dionysius the Areopagite, in his Neo-Platonism; they distinguish *contemplatio* (the immediate intuition of truth) from *cogitatio* (sensuous knowledge) and from *meditatio* (discursive thought). As regards its object they taught that there are six stages in contemplation, the lowest, *in imaginatione et secundum imaginationem*, consists in contemplating divine beauty in the beauty of the sensible world; the highest, *supra rationem et præter rationem*, in penetrating into mysteries that are inaccessible to reason. From the psychological point of view there are three stages in *contemplatio*, of which the lowest is a *dilatatio mentis*; the second an elevation, *sublevatio mentis*; the third an alienation, *alienatio mentis*, an ecstasy in which, by suppressing all individual consciousness, we lose ourselves in God. Mediaeval mysticism finds its most poetic and most popular expression in the celebrated *Imitation of Christ*.

Descartes' Empirical Ethics: the Soul Considered in its Relation to the Body; The Life of the Soul; Knowledge and Good-will.

With Bacon and Descartes, Ethics as well as philosophy became more distinct from religion and more independent of theology. There was a return to the traditions of antiquity, and an attempt was made to solve the problem of human destiny through reason alone. The Cartesian Rationalists sought to find the principles of virtue and happiness in the knowledge of universal and necessary laws, while the Empiricists would derive the whole of morality from the observation of human nature, from such a fact, for example, as egoism or sympathy. It is to Kant that the merit belongs of having restored Ethics by fixing its principle elsewhere, and founding it wholly upon the idea of duty.

Descartes' conception of Ethics was that of the ancients. He endeavours to define the Supreme Good which comprises felicity and virtue, and, by proving that these two terms coincide, to reconcile Epicurus with Zeno. (*Letter to the Queen of Sweden.*) Descartes has two ethical systems, one of which leads to the other. The first is empirical and has to do with

the life of the soul in its relation to the body, its object being to free us from the passions and thereby make possible the life of pure intelligence. The second, which is based on good-will and knowledge, aims at an independent existence for the soul and a felicity attainable only through its own efforts.

The human body is an automatic machine in which everything is explained by extension and the laws of motion. To this machine a soul is joined, and what was mechanical action in the body becomes passion in the soul. All the passions (admiration, love, hate, etc.) are therefore merely an image of the body and its internal movements reflected in the soul (see Vol. I, Chap. VIII). Since self-possession, or the control of passion, is the condition of wisdom, it is clear that medical science is most important to the life of the soul; for what science could be more valuable than the one which, by enabling us to regulate the course of our animal spirits and to change their composition, would make us masters of our passions? By means of remedies properly proportioned, we should thus be able to prearrange and fix accurately the degrees of sadness, of joy or love.

"Descartes thought that nothing would be more certain to produce temporal felicity than a happy combination of medicine with mathematics" (Baillet, III, 5). And Descartes himself says, "the preservation of health is the first good, and the foundation of all other goods; for our mind depends so much on our temperament, and on the state of our bodily organs, that if it were possible to find any means by which men would become wiser and more ingenious than they have hitherto been, it is in medicine that these means must be sought" (*Disc. de la Méth.* 6th part).

Thus the first chapter of the Cartesian Ethics would be a system of hygiene, giving prescriptions that would ensure to man complete mastery over his passions.

Notwithstanding all his efforts, Descartes was unable to formulate this therapeutic of the passions. It might seem, then, that we must remain the slaves of our bodies. But what appeared to be our ruin is in reality our salvation, for the relation between body and soul is a reciprocal relation. Hence certain *passions* (correlative modifications) must correspond in the body to the mental acts, and in this fact we perceive a means of making ourselves free. For if the soul is free, and if everything that takes place in it affects the body,

then, by directing and regulating the soul, it is possible to regulate the body. Medicine enabled us to attack the body directly, to fight against the passions by physical means; but through the indirect action of the soul we recover possession of ourselves. It is true that the soul is only capable of acting on itself, but by calling up such and such a thought and dwelling on it, it may, firstly, suspend the action which would ensue from the passion (*Pass.* 146); secondly, it may alter the motion of the small gland which is its seat and give a new direction to the animal spirits, and produce thereby in itself a different or even a contrary passion (*Pass.* I, 45); thirdly, the soul may sometimes do yet more, for, without altering the action of the gland, it may through habit associate with this action thoughts which it has had the strength to dwell on while the action lasted. "The connection between our minds and our bodies is of such a nature that when we have once associated a certain bodily action with a certain thought, the one never presents itself without the other" (*Pass.* II, 136).

Through habit, therefore, we are able to change the natural order of the passions and invert the relations between the physical and moral life. We may act in such a way that to the motions of the pineal gland, instead of the passions which would naturally correspond to them, there may correspond quite opposite thoughts, calculated to make us behave in a manner befitting rational, independent beings. Thus, since we cannot act mechanically on the mechanism of the body, we have recourse to artifice and ingenuity (*Pass.* I, 47). In this way we find a moral equivalent to medicine, and a moral hygiene is substituted for a physical; the indirect action of the soul takes the place of the direct action of medicine.

The soul, though joined to the body, is distinct from it, and has its own separate life. "It may enjoy pleasures apart from the body" (*Pass.* III, 212). By controlling the passions it separates itself from the body, and recovers its true nature, which is to be free and to depend only on itself and on its thoughts. Thus moral hygiene leads up to true morality, which is the science of the Supreme Good. What then is the Good which is to give at once happiness and virtue?

"It consists in the determined will to do right, and in the contentment which such a will produces. Not only is our free will in itself our highest possession, inasmuch as it makes us in a manner like to God, and seems to exempt us from being subject to Him, the proper use of it being consequently the greatest among goods; but it is also the good that belongs to us most especially and is for us the most important. From this it follows that it is only from our free will that our highest satisfactions can proceed" (*Letter to the Queen of Sweden*). "It is not necessary that our reason should be never mistaken, it is enough if our conscience tells us that we have always had sufficient firmness and virtue to execute all those things which we have judged to be the best; and thus virtue alone suffices to give us contentment in this life" (*Letter to Princess Elizabeth*, 1st May, 1645).

Having, like Kant later on, placed the end of man in the good will, Descartes then seems to contradict himself, and, following Socrates and Plato, to make everything depend on the intellect.

"When our virtue is not sufficiently enlightened by the understanding it may be false, and in this case the contentment which it brings is not real and secure. Man's highest happiness depends on the right use of reason, and consequently the study that leads to its acquisition is the most useful occupation he can have, as it is also, without doubt, the most agreeable and the most delightful" (*Letter to the Princess Elizabeth*, May, 1645). How can this be doubted when we remember that "we have only to judge rightly, and to judge as correctly as possible, in order to acquire all the virtues and all the advantages and goods attainable?" (*Disc. de la Méthode*, 3rd part). "Omnis peccans est ignorans. If our understanding never represented to the will as good the things that are the contrary, the will could never be mistaken in its choice" (*Letter*, April, 1637).

This being the case, the ethical problem takes the form of a scientific problem. We must not consent to pursue pleasures that we perceive confusedly, we must not accept a thing as good unless we see plainly that it is so; in a word, we must be on our guard against confused ideas, and be guided only by those that are clear. The problem then is how to determine the order of perfections, how to make a science of the different kinds of good, and of their relative value. But Descartes never constructed such a science. He was content to show that passion exaggerates the worth of the pleasures it seeks, and to lay down this general rule: Pleasures of the mind which depend on ourselves, so far surpass those of the body that they alone are sufficient to our happiness. Science being

incapable of entering into particulars, cannot take the place of conscience; each one of us has independently to strive after the best, which, like the true, is apprehended on evidence. And since life allows no delays we must be content to possess a good will. We have seen that Descartes leads us from good will to right reason, and now, from right reason, we find ourselves thrown back on good will.

But the contradiction is only apparent, for knowledge is closely connected with freedom, since judgment is a voluntary act, and to affirm or to deny is to will. Knowledge both presupposes and flows from freedom. I owe the truth to myself, and am to a certain extent responsible for my errors. The Supreme Good is good will, which alone depends on ourselves; but good will is nothing else than the will "to make the best, possible use of our minds in order to know what to do and what to avoid on every occasion in life" (*Letter to the Princess Elizabeth*, 1st May, 1645). Good will is our most precious possession; it justifies our actions abundantly to ourselves and before God, and it insures to us inward contentment; but only through the intellect is true wisdom attained. Wisdom implies knowledge. Wisdom should be our ideal, which it is the duty of every man to get as near to as possible; and the inward satisfaction which comes from this striving after the best constitutes our happiness.

This would appear to be a solution of the ethical problem. But may not the vicissitudes of life throw the soul back again into the bondage of pain? Man lives in a world in which events occur over which he has no control; how can it be said that he depends on himself alone? Descartes tries to eliminate such unforeseen events from the problem of life, by considering man in his relation to the world and to God. Let us remember, he says, that everything in the universe happens mechanically, according to inflexible laws, and we shall endeavour to change the nature of our desires rather than the order of the world. Fortune is "merely a chimera, born of an error in our understanding" (*Pass.* II, 145). If we were once convinced that when we have done all that lies in our power the advantages we do not possess are all equally beyond our reach, "we should no more desire health, when ill, or freedom, when in prison, than we now do bodies as incorruptible as diamonds,

or wings with which to fly like birds" (*Disc. de la Méth.* 3rd. part). The consciousness of a universal necessity delivers us from all superfluous regrets or desires.

But as evil exists none the less for being necessary, this submission to the laws of the universe resembles a defeat. There would appear to be something which evades the good and the intelligible. Yes, if we forget that everything depends on God, that everything is arranged by His Providence. We cannot penetrate into the ways of God, but we know that they express the highest perfection; and when we have acted as we thought best, this knowledge should make us feel content, whatever our fate may be.

"The true object of love being perfection, when we lift up our minds to consider God as He is, we feel ourselves naturally so strongly disposed to love Him that we derive joy even from our afflictions, remembering that, in all that happens to us His will is fulfilled" (*Letter to the Princess Elisabeth*, 13th June, 1645). "Thus it is that man, uniting his will to that of God, loves Him in so perfect a manner as to desire nothing more in this world but that the will of God be done. Consequently, he no longer fears either death, or pain, or disgrace, knowing that nothing can befall him that has not been appointed by God, and he has so great a love for the divine ordinance, he deems it so just and so necessary, he knows himself to be so dependent on it, that even when he is expecting death or some other evil, if the impossible were to happen, and he found he had the power to alter this decree, he would not have the desire to do so" (*Letter to M. Chanut*). •

Having thus fused our will with that of God, we participate in His omnipotence, and nothing occurs without our willing it. Happiness is the reward of virtue; and man's supreme good depends on man himself.

"It is certain that if a man who is well born, in good health, and in want of nothing, at the same time is as wise and virtuous as another who is poor, unhealthy, and deformed, he may enjoy a more complete contentment than the poor man. Nevertheless, as a small vessel may be as full as a large one, though containing less liquid, so also, taking the contentment of each individual to lie in the fulness and satisfaction of his desires, I have no doubt that, when these are regulated according to reason, the poorest man and the least favoured by fortune and nature may be as entirely content and satisfied as other men" (*Letter to the Princess Elisabeth*, 1st May, 1645). "By the internal felicity which good will of itself produces, we may hinder all the evils that come from without

however great, from going any deeper into our souls than does the sadness excited by actors when they represent some tragic event" (*Letter to the Princess Elizabeth*, March, 1646).

Life's external order may be disturbed by accidents, but not the inward harmony of the soul; for accidents are necessary, and since they are part of God's purpose, we should not only accept but desire them. Hence nothing can happen that is contrary to our desire. To make our will and our understanding one with the will and understanding of God—in this lies the whole of morality.

In this way, then, our soul, which was at first threatened with bondage, becomes free; the passions which it experiences are no longer the expression of the affections of the body; its love being no longer the effect of the course of the animal spirits, is born of an act of judgment which disposes the soul to become attached in will to the things that it deems good (*Pass. II*, 79). Its joys, which are purely intellectual, spring from its own activity alone. Not only is the soul no longer the expression of the body, but their relations are reversed. It is now the body that expresses the soul by its movements, and becomes its slave. There is a passion that corresponds to virtue—true nobility, which causes a man to form as high an opinion of himself as he legitimately can. Nobility is the bodily expression of virtue. It consists of right notions and principles of morality, enforced by the action of the animal spirits. Even that highest, most spiritual kind of love, the love of God, may become a passion, and affect the course of the spirits. Thus the soul is its own mistress because its thoughts depend on itself alone, and it is mistress of the body because the body is the expression of the soul, and only gives back to it, under the form of passions, its own acts and thoughts. Finally, the soul is mistress of the world because it is united to God by love, and participates, therefore, in His will and sovereign power.

Malebranche; Ratios of Perfection; Love of the Universal Order.

A science of goods and of their relative value remained a *desideratum* in the ethical system of Descartes, who contented himself with saying that the Good, as well as the True, is dis-

covered by the light of evidence. Malebranche in his *Ethics* develops this idea, which was merely suggested by Descartes. There are two kinds of relation between things: a relation of magnitude and a relation of perfection. The former has to do with truth, the latter with order; the former bears on pure science, the latter on Ethics.

If the human intellect, fashioned diversely by custom and education, and different at different periods, is able to discover this immutable order, it is because there is in it a divine impersonal element, namely, reason, the Eternal Word by which all minds are united. Reason is the Divine voice speaking in us, and he who listens not to it falls into error and disorder. "He who values his horse more than his coachman, and he who thinks that a stone has in itself a greater worth than a fly or the smallest organism, does not perceive what perhaps he imagines himself to perceive; for it is not universal reason, but individual reason, that leads him to judge things so" (*Morale*, I, i, 13).

Again, it is because universal reason is not followed that morality differs in different countries and at different periods.

"Thus with the Germans it is virtuous to be able to drink. One can have no intercourse with them if one does not get drunk. It is not reason but wine that binds society together, and makes settlements and contracts" (*Morale*, I, ii, 7).

Love of the order in things is the only virtue. Actions that are merely in conformity with this order, namely, duties (the *καθήκοντα* of the Stoics), are to be distinguished from those which are inspired by the love of this order, namely, virtues.

"We must not, owing to the agreement between the terms, confuse virtues with duties. Men are deceived by this. Some there are who imagine that they are following virtue when they only follow the natural inclination which they have to fulfil certain duties; and as they are by no means led by reason, they are in fact excessively vicious the while they imagine themselves heroes of virtue" (*Morale*, I, ii, 6). "He who gives his fortune to the poor, either through vanity or natural compassion, is not liberal, because he is not led by reason; and his action is not inspired by love of the order of things, but is the result of pride or of a merely natural tendency" (*Ibid.* § i).

Virtue, therefore, is more than submission pure and simple to the order of things. It is submission through love

of this order. It is, moreover, not an actual and momentary obedience, but one that is continuous and has grown into a habit. "Virtue is a habitual, free, and dominating love of the immutable order" (*Ibid.* I, iii, 20).

To love this order is to love beings and things in proportion to their perfection, and is therefore, in the first place, to love God, Who is absolute perfection, above all things; and, secondly, to love all other things only according to their relation to God; or, better still, to love only God in them, that is to say, the perfection in them which makes them worthy of love. The love of order is therefore union with God, by conformity of mind and will.

As God necessarily loves order and all things according to this order, He loves Himself above everything, and next to Himself His creatures, in so far as He finds Himself in them, that is to say, according to the degree of being and perfection which they possess. There are two kinds of love, the one kindness or esteem, the other the love of union. The first consists in loving things only in so far as they are lovable; the latter consists in giving oneself wholly, without reserve, to the beloved object, or, in a word, in uniting oneself with it (*Ibid.* I, iii, 8). God alone deserves to be loved in this way, because He is perfection. He is the Good in itself, and He alone also is the efficient cause of all the actions of His creatures. It is therefore in Him only that we must love His creatures. It is according to His will and His law that we must measure out to them the love which is benevolence.

This is the principle that governs practical morality. The law of God and of all things in Him is the sovereign rule of conduct, as vision in God is the law of knowledge. Man should only love in himself that which makes him worthy of love in the eyes of God. Reason is God present in us. We are the temples in which His wisdom dwells, and in which He desires to be adored. We should fight against everything in us that is an obstacle to reason—against the senses, the imagination, the passions (*Ibid.* II, xi, xii, xiii). The cultivation of reason is homage rendered to God. Attention is a natural prayer, by means of which we receive illumination from reason. "Strength and freedom of mind, which consist in being disposed to seek and follow truth, and to accept it

solely on evidence, are virtues and cardinal virtues" (*Ibid.* I, vi, 5).

Social morality is inspired by the same spirit as private morality. Our love for others must be regulated by their relation to God. The sovereign is the man among all others who has the highest place in our esteem, because he is nothing less than the representative of God on earth. In his presence, not only our bodies but our minds should be bowed down in reverence. We must humble ourselves and respect the greatness and majesty of God in the power of the prince (*Ibid.* II, ix, 2). But the lowest among men is also worthy of our goodwill and our esteem.

"We must not only respect and show respect to the lowest among men, and to the poor, but also to sinners and to those who commit the worst crimes. Their lives are abominable, their conduct is contemptible, but their persons are still deserving of respect" (*Ibid.* II, vii, 4).

And this is because they have never ceased to be the temples of Jesus Christ and to form with us part of an eternal society in God. Even the child should be to his parents an object of respect, no less than of affection. He should not be governed by force, but his feeble reason should be led by gentle persuasion.

"Let no father imagine, that as a father, he has an absolute and independent authority over his son. He only is a father through the efficacy of God's power, and he should only govern according to His law" (*Ibid.* II, x, 18).

Thus all duties have their principle in the love of God, which is the only virtue, though it takes various forms corresponding exactly with our various duties. —

Spinoza : Determinism ; There is no Absolute Good or Evil ; The Good for Man ; Theory of Goods ; Bondage and Freedom. Spinoza a Utilitarian and Mystic.

The consciousness of a universal necessity which is only one element, or moment, in the Ethics of Descartes, is the first principle and the end of morality with Spinoza, who makes no distinction between this consciousness and the love of God. In this as in other respects Spinoza's doctrine is Cartesianism made logical, simplified, and impoverished. It is remarkable

that the principal work of Spinoza should be a theory of Ethics, seeing that he denies both freedom and the existence of good and evil. Human actions, according to him, are governed by an inflexible mechanism. The belief in free will is an illusion and a folly. Indignation against the wicked is childishness. A madman is no more bound to live according to the dictates of reason than the cat is bound to live according to the laws of a lion's nature (*Theol. Pol.* Ch. XVI).

But if we are necessarily subject to the laws of our nature, may we not lay the blame of our sins and misfortunes on God? No.

"Men are in God's power as clay is in the hands of the potter, who from the same lump makes vessels some to honour some to dishonour" (*Rom.* IX, 21). "No one can bring a complaint against God for having given him a weak nature or infirm spirit. A circle might as well complain to God of not being endowed with the properties of a sphere, or a child who is tortured, say, with stone, for not being given a healthy body, as a man of feeble spirit because God has denied to him fortitude and the true knowledge and love of the Deity, or because he is endowed with so weak a nature that he cannot check or moderate his desires" (*Letters to Oldenburg*, 23 and 25). o

To desire things to be otherwise than they are, to chafe against nature, is to fail to recognize that all that is is necessary, and is of necessity that which it is.

On the other hand, that which is necessary cannot fail to be good, and, from the ethical point of view, necessity should be called God, Providence, or Wisdom. Thus every event is justified by the very fact of its occurrence which is in immediate connection with the supreme necessity. "The distinction between good and evil has no absolute value: "For we all admire in animals qualities which we regard with dislike and aversion in men, such as the pugnacity of bees, the jealousy of doves" (*Letter to Blyenbergh*). The moral sanction is not founded on responsibility, but is a consequence of the necessary, fixed order of things.

"He who goes mad from the bite of a dog is assuredly excusable, yet he is rightly suffocated. Lastly, he who cannot govern his desires and keep them in check from fear of the laws, though his weakness may be excusable, cannot, nevertheless, enjoy either peace of soul or the knowledge and love of God, but necessarily perishes" (*Letter to Oldenburg*, 25).

In one sense, therefore, there is, for Spinoza neither good nor evil; but it does not follow that because the same explanation serves for all things, all things are to be regarded as identical or equal. *Tout expliquer n'est pas tout confondre*. There are things that may be called good or useful, bad or harmful, according as they increase or diminish our perfection, that is to say, according as they bring us nearer to God or lead us further away from Him. Thus, in so far as we perceive that a thing affects us with pleasure or sorrow we call it good or evil (*Ethics* IV, Prop. viii). Pantheism, which justifies the existence of all things, is careful not to despise the lower kinds of good.

"Therefore to make use of what comes in our way and to enjoy it as much as possible (not to the point of satiety, for that would not be enjoyment) is the part of a wise man. I say it is the part of a wise man to refresh and recreate himself with moderate and pleasant food and drink, and also with perfumes, with the soft beauty of growing plants, with dress and with music, with many sports, with theatres and the like, such as every man may make use of without injury to his neighbour" (*Ibid.* Prop. XIV, note).

Joy is good, the gloomy meditations of the mystic are foolishness. "A free man thinks of nothing less than of death; and his wisdom is a meditation not of death but of life" (*Ibid.* Prop. XLVII). While he approves all kinds of pleasure, Spinoza does not omit to determine the value of each one in particular, and to give it a place according to its utility or, what comes to the same thing, according to its degree of being or perfection. "There is no small difference between the joy which actuates, say, a drunkard, and the joy possessed by a philosopher" (*Ibid.* III, Prop. LVII, note). In this way Spinoza establishes a dialectic, or a hierarchy of goods.

The good is *freedom*, evil is *bondage*, and the degrees of perfection are indicated by the degrees of freedom. Bondage means subjection to the passions, or life according to appetite. Appetite, being connected with the imagination and the senses, has for its object the goods that are present, trivial, and fleeting. The man who yields to these is swayed by inadequate and confused ideas. Freedom, on the other hand, consists in living under the dominion of reason, which conceives things under the form of eternity (*sub specie aeternitatis*) and is attracted

by future goods as well as by those which are present and immediate. Reason makes known to each one what is in conformity to his nature and useful to him. Lastly, reason has for its object an imperishable good, namely, knowledge, and more especially knowledge of the eternal truths. But Spinoza can only show us the means by which man becomes free, that is, knowledge; we cannot make ourselves free, we only know how freedom comes to us.

"An emotion which is a passion ceases to be a passion as soon as we form a clear and distinct idea thereof" (*Ethics*, V, Prop. III). "An emotion, therefore, becomes more under our control, and the mind is less passive in respect to it, in proportion as it is more known to us" (*Ibid.* Coroll). "But what is it to know things if not to understand their necessity? The mind has greater power over the emotions and is less subject thereto in so far as it understands all things as necessary" (*Ibid.* Prop. VI).

In governing our passions we make our desires as well as our thoughts conform to the order of the universe. Freedom is the identification of ourselves with the universal necessity, for we become free through knowledge, and knowledge is participation in Being, and as there is only one Being, with the necessary Being.

With Spinoza, as with Parmenides and Plato, thought is identical with its object; so that, in so far as it possesses knowledge of eternal truth, the mind is itself eternal, and in so far as it extends this knowledge it also increases its share of immortality. In like manner, to know God is to participate in His essence; and if man, having reached the term of his moral development, is truly free, it is because, being then united to God by intellectual intuition, he is himself God, and forms part of the supreme necessity, which is called freedom because it develops only according to the law of its own nature. Freedom for man consists, therefore, in being one with God, with the Being, that is, who, considered as He is in Himself, is to be called necessary, but, considered in His relation to other things, which are merely the modes of His activity, is to be called free.

Spinoza liked to join together contrary terms, such as freedom and necessity. Following his example, one may say of him that he was at the same time, and without inconsistency, both a utilitarian and a mystic; for he gives as the principle of

his Ethics now the tendency of a being to persevere and to perfect himself in his being—the love of self; now the intellectual love of God. The reason of this is that to him these two kinds of love are only one. It is the nature of man to know, and the object of knowledge is Being in all its degrees and in all its forms, but principally in its highest form, which is the Eternal and the Divine. “Hence the mind’s greatest good is the knowledge of God, and the mind’s highest virtue is to know God” (IV, Prop. XXVIII). But to know God is to love Him, for love is nothing else than joy accompanied by the idea of its object. Again, to love God is to love one’s self, and to love one’s self the more according as one is in a manner more fully one’s self; since he who has reached the term of knowledge has also reached the highest development of his own nature. Thus the love of self leads to the love of God, and the love of God is only a higher form of self-love.

But having described the Ethical theory of Spinoza as a higher kind of Utilitarianism, we must now, with apparent self-contradiction, show that from another point of view his system is characterized by a noble disinterestedness. For he repudiates as servile the virtue that is based merely on the fear of hell or on the hope of another life. He cannot adequately express his contempt for the common opinion according to which “piety, religion, and generally all things attributable to firmness of mind are burdens which after death men hope to lay aside” (V, Prop. XLI, note). What an insult to morality is this shameful fear of the tortures of Hell, which makes so many unfortunate men bear the “crushing burden of piety!” and how much nobler and more pure, according to Spinoza, is the notion which he would have us form of virtue! “Even if we did not know that our mind is eternal, we should still consider as of primary importance piety and religion, and generally all things which we have shown to be attributable to courage and high-mindedness” (V, XLI). Are we to understand by this that, like Kant, Spinoza regards virtue and happiness as antagonistic, so that the one requires the sacrifice of the other? On the contrary, he holds that the all-wise necessity by which the world is governed has inseparably linked happiness with the life that is rational and free, and he finds man’s happiness in perfection and virtue alone.

"Blessedness is not the reward of virtue, but virtue itself; neither do we rejoice therein because we control our lusts, but contrariwise, it is because we rejoice therein that we are able to control our lusts" (V, XLII).

To sum up: the happy life, the free, rational, or divine life—for all these terms correspond to the different points of view from which the one and the same thing may be considered—is the development of the human mind according to its special nature, its progress towards its end, namely, the knowledge and the love of God.

We have considered the human mind in its individual development only; but it has merely to obey the laws of its own nature in order to be in harmony with other minds. Where morality prevails the rules of social life are observed. What divides men is their appetites, because these are directed towards objects which cannot be shared, as for example wealth. In setting the life of reason above the life of appetite, morality, although occupied solely with the perfection of the individual, serves by way of reaction the social interest. Reason unites men: it is passion that divides them, for the object of reason is God, who gives Himself to all without reserve, and communicates Himself without losing Himself. Nay, it is in the nature of this Supreme Good, which is called the knowledge, and the love of God, to grow, in a manner, by the common possession of it.

"This love towards God cannot be stained by the emotion of envy or jealousy: contrariwise it is the more fostered as we conceive a greater number of men to be joined to God by the same bond of love" (Part V, Prop. XX).

Thus the love of God is the binding force in social life, and therefore the principle on which the whole of morality depends.

Ethics of Leibnitz: The Sovereign Good; The Moral Instinct and Reason; Nature and Grace; Theory of Love.

Leibnitz, like Spinoza and Malebranche, regards perfection as the end of morality, and intelligence as the principle of perfection. According to him, the fact that our actions are psychologically determined does not deprive them of their moral character, any more than the fact that our judgments are psychologically determined prevents them from being true or false. Just as we need logic for the direction of our under-

standing, so also do we need an ethical system for the guidance of our will. The natural good of a being consists in its perfection.

"All that elevates the soul I call *perfection*. Perfection consists in the force of action; and as there is in every being a certain force, the greater the force the higher and more free is its essence. Moreover, the greater a force is the more manifest is plurality in unity in it. Now the one in the many is nothing else than harmony, and from harmony beauty springs, and beauty engenders love" (*Ueber die Glückseligkeit*, Erdmann's Edn. p. 672).

The perfection of a rational being is measured by the sum of his distinct perceptions (*Letter to Wolff*). Moral good is therefore the striving after knowledge, the cultivation of reason, the continuous progress from confused to distinct perceptions. Pleasure for a living being is nothing else than its consciousness of perfection, and perfection and happiness are identical terms. Moral life is therefore the continuous passage from a lesser to a greater perfection, and hence the progressive conquest of happiness. There is thus a foundation of good in the nature of the object itself, and it is the natural good which becomes moral good when will is added. *Bonum naturale quum est voluntarium est bonum morale* (*Ibid.*).

Nature of itself leads man to his end, that is, to happiness, for nature inclines us to pursue joy and avoid sorrow (*New Essays*, I, II, 1). Now joy is a sign of our free development and advancement towards perfection. Inclination to pleasure implies therefore a desire for perfection vaguely and confusedly felt, but real and effectual; and nature, whence this desire comes to us, is found to be virtually moral. So there exists further a general social instinct, an affection between the male and female, between father and children, "which are part of this natural law, or this image of law, which, according to the Roman *juris consulti*, nature has taught the animals" (*Ibid.* 9). Does morality consist, then, in following Nature? Rousseau's doctrine was criticised in advance by Leibnitz. Instinct, being entirely concerned with the present, is not a safe guide.

"For felicity is only a lasting joy; our inclination, however, does not tend to felicity proper, but to joy, that is to say, to the present. It is reason which prompts to future and enduring welfare" (*Ibid.* 3). Moreover, instinct is blind: "the appetitions, called in the schools *motus*

primo primi, are like the natural tendency of the stone, which goes by the most direct, but not always the best path towards the centre of the earth; for it is not able to see beforehand that it will meet rocks, upon which it will break in pieces, while it would approach its end more directly if it had mind, and the means of turning aside from them. Thus it is that by going straight for present pleasure we sometimes fall over the precipice of unhappiness" (*Ibid.* II, XXI, 36).

In short, instinct is confused perception, which should make way for perception that is distinct. The impressions which nature has given us are only helps to reason, and should not take the place of reason. It is not enough for us that we are prompted to acts of humanity by *instinct*, or *because it pleases us*; we must further be induced to do them *by our reason and because it is just* (*New Essays*, I, II, 4). All these innate principles which we feel and approve even when we have no proof of them, should be converted into fixed maxims, into distinct truths.

Leibnitz is not one of those philosophers who see in instinct the enemy of reason: but he reconciles them although he also distinguishes between them. The former belongs to every kind of soul, the latter is the privilege of spirits or rational souls. One leaves us in the physical realm of nature, the other admits us into the moral realm of grace. Instinct has moral value only in so far as it leads to reason; in the same way, nature is sanctified by preparing the way for grace, by contributing through its laws to the triumph of justice.

"We should also notice here another harmony between the physical kingdom of nature and the moral kingdom of grace; that is, between God considered as the architect of the mechanism of the universe, and God considered as monarch of the divine city of spirits" (*Monadology*, 87). "And therefore sins, by the decree of nature and by virtue even of the mechanical structure of things, must carry their punishment with them, and in the same way good actions will obtain their rewards by mechanical ways through their relation to bodies, although this may not, and ought not always to happen immediately" (*Ibid.* 89).

But the harmony between the two realms does not go so far as to make them identical; God does not look in the same way on souls which are merely *mirrors of the universe*, "and on spirits which are His own *image*." To the former, He is only "what an inventor is to his machines"; to the latter, He is

"what a prince is to his subjects, or even a father to his children" (*Monadology*, 84). Reason is infinitely higher than nature; it brings us nearer to God and in a manner makes us participate in His creative power, for "our soul is *architectonic* in its voluntary actions, and, discovering the sciences according to which God has regulated things (*pondere, mensura, numero*, etc.) it imitates in its department and in the little world where it is permitted to exercise itself, what God does in the large world" (*Principles of Nature and Grace*, 14). Again, reason makes us enter into a "sort of society with God," and places us, under the laws of that perfect government of spirits in which no good action goes unrewarded, and no wicked action unpunished.

- Finally, reason is both the Absolute Good and our individual good. Reason constitutes our essence, and morality, whose object is the development of our individual perfection, is the same thing as the cultivation of reason in us. We shall have reached moral perfection when our soul has risen to distinct perception, for the violent desires of blind passion will always have less force than the persuasive sweetness of enlightened reason.

"If a truth has no effect on the mind it is because it has not been given the degree of distinctness of which it is capable. In spite of appearances truth is the strongest thing in the world, provided we are not content to consider it from the outside and merely to call it by its name, but penetrate into its recesses and perceive distinctly the logic and harmony contained in it" (Erdmann's Edn. 269, a).

The more our reason is developed, and the further it extends, the more also will it unite itself with all that is. Like every other monad, our mind is a mirror of the universe. The more it becomes conscious of its own true nature, the more also will it become conscious of its relation to other beings. Hence according as it advances towards perfection it rejoices more and more in the perfection and the joy of other beings. In other words, the more perfect it becomes, the more it loves. To love or to cherish, is to rejoice in the happiness of others, or what comes to the same thing, it is to make the happiness of another one's own. *Amare sive diligere est felicitate alterius delectare, vel quod eodem redit, felicitatem alienam adsciscere in suam* (*De notione jur. et just.* Erdm.

p. 118). Love is disinterested, since we feel the happiness of him whom we love as our own, and consequently we enjoy his happiness directly, without thinking of any ulterior advantage. This love is at first bestowed on other men, for nothing is more natural to us than to take part in their perfection and their joy, but it is in God that love finds its supreme object. The love of God is disinterested, for it is caused by no sensible attraction, and at the same time it is our greatest good, our nearest interest, for God is our good and our perfection.

"God being the most perfect, and the most happy, and consequently the most lovable of substances, and truly pure love consisting in the state which finds pleasure in the perfections and happiness of the beloved object, this love ought to give us the greatest pleasure of which we are capable, when God is its object . . . from the present time on, the law of God makes us enjoy a foretaste of future felicity . . . it gives us perfect confidence in the goodness of our Author and Master, producing a true tranquillity of mind, not like the Stoics, who force themselves to patience, but by a present content which assures us a future happiness" (*Principles of Nature and Grace*," §§ 16, 18).

To love God is to rise to the comprehension of His goodness, to understand that the world, being governed by Him, cannot be anything but good; that it is at least the best of all possible worlds; and if order has not at the present moment been realized, everything must finally result for the well being of the good, that is of those who are not discontented in this great State, who having done their duty, trust in Providence (*Monadology*, 90). Underlying the ethical system of Leibnitz we recognize his metaphysical optimism. In declaring that life is good, he only gives expression to the general thesis of which his whole ethical system is the proof. Life is good because everything in it has its reason, because, as we have seen, nature, passion, and the senses, rightly viewed, are not contrary nor even foreign to morality, because the individual good, the *οικείον έργον* of Aristotle, is not in conflict with the Absolute Good of which Plato speaks, because enlightened egoism finds its own advantage in love, because happiness is not in reality distinct from perfection; in short, because everywhere we find harmony, that is to say, the regular progress of all things towards good, towards supreme happiness.

Utilitarian Systems. Hobbes: Individual Interest. Helvetius: Agreement between Individual and General Interest.

• All the Cartesians looked for the principle of virtue and happiness in reason. With them, the supreme good consists in knowledge of the Absolute, which unites us to God, and makes our will one with His. The Empirics thought to find in some particular fact, such as the love of pleasure, or the moral • instinct, or sympathy, the principle which, when followed out, suffices for the organization of private and social life. Hobbes lays down clearly the principle of utilitarianism, and from it deduces with the utmost rigour his main dogmas. Sensation he declares to be the criterion of good. Hence the good is pleasure, and pleasure is a motion "helping vital action" (*jucundum a juvando*), a motion which appears in consciousness under the form of desire. The value of things is measured by the desire they engender, and their comparative excellence by the intensity of this desire. Again, it is in desire and not in possession that the good lies. In a general way pleasure does not consist "in the repose of a mind satisfied," but "in a continual progress of • the desire from one object to another, the attaining to the former being still but the way to the latter." Actual pleasure is the never-ceasing • renewal of desire in us. Thus Hobbes returns to the Cyrenaic doctrine: Pleasure lies in motion, it is motion itself. *Bonorum maximun ul. fines semper ultiores minime impedita progressio.* As he recognized no other good but the physical pleasure which results from the laws of life, or rather, which is life itself, he might have said, of pleasure what he said of life, that it is a perpetual motion which, when it cannot advance in a straight line, becomes a circular motion. • • •

But Hobbes takes a higher point of view than Aristippus, for, instead of accepting the present pleasure just as it comes, he takes into consideration the good and evil resulting from it, and he teaches that conduct should be regulated with a view to the *useful*. For a thing may not in itself be good which yet becomes so because it is conducive to happiness. Thus power may in itself not be delightful, but • it has the effect of making others peaceably disposed towards us; it protects us against envy and malice; it compels respect; it wins for us good will and love, and all these advantages make it desirable

and good. In the same way, human society, which was in the beginning merely a state of *bellum omnium contra omnes*, becomes, when for the blind pursuit of pleasure is substituted the intelligent pursuit of the useful, a state of peace and order in which the individual in return for his independence, which he has forfeited, obtains an advantage that is much more real, namely, security. Inasmuch as it saves us from the miseries of a state of nature, society is advantageous and useful, and therefore good.

At the same time, the interest by which, according to Hobbes, our actions should be guided, is always individual interest—*homo homini lupus*; and the instinctive hatred which men bear to their fellow-creatures may be veiled by politeness and education but cannot be obliterated, and the proof of it is the pleasure in backbiting that prevails in conversation (*De Cive.*, Pref.). But our hatred for others flows from self-love. As soon as they serve our interest they become lovable, and as man hates his fellowmen on account of the injury they have caused him, he may love them on account of the advantages he derives from them. We may act benevolently towards others because it is an egoistical, and therefore a natural satisfaction to feel that we have the power to make not only our own happiness but that of others. Pity for others in their misfortunes is the fear we have that the like calamity may befall ourselves. Finally, when we recognize the superiority of a person and his power to injure us, it is right to honour him. Thus Hobbes is far from making benevolence arise out of self-love, like Bentham; the general interest has no importance in his eyes except in so far as it promotes the individual interest. His doctrine is one of exclusive egoism.

The doctrines of Helvetius were at once a continuation and a contradiction of Hobbism. He adopted the premisses of Hobbes and rejected all his conclusions. Self-love was the only rule he recognized. "The moral universe is as completely subject to the laws of interest as the physical universe to the laws of motion" (*De l'Esprit*, II, 2). But while to Hobbes the cause of division and hatred was the interest of the individual, Helvetius discovered, in the working of the laws of this interest, the principles of tolerance and of sympathy.

"Men are not wicked, but they are the slaves of their own interests (*Ibid.* Ch. II, 5). We must take them as they are; to be vexed by the effects of their self-love would be like complaining of an April shower. . . . Men are what they must be; all hatred of them is unjust; fools bring forth folly as a wilding bears bitter fruit . . . the humane man is he to whom the sight of another's misfortune is unbearable, and who to escape from this sight is compelled, so to speak, to succour the unfortunate."

Benevolence is therefore a matter of nerves. He who acts kindly thinks only of his own relief. While obeying the dictates of his heart he is ruled by his own interest. This interest may change so as to bring about alternately virtue and vice, and just as it inspires different courses of action, it also gives rise to contradictory opinions. In the eyes of him whom he condemns a judge is always unjust, and in the opinion of him in whose favour he decides he is always just. Hence if morality did no more than prescribe regard to self-interest, there would be no certain rule for it. There are two paramount interests which conflict with one another: the individual, and the general interest.

"Hence the main object of moralists should be to determine the proper use of rewards and punishments, and to discover how these can be employed in order to connect the personal with the general interest. This union is the supreme end which the science of Ethics should set before itself. If citizens could not attain their own happiness without at the same time furthering the public good, the only evildoers would be the madmen; all men would be compelled to be virtuous, and the felicity of nations would be a blessing bestowed upon them by moral science" (*De l'Exp.* II, 22).

Thus Helvetius calls upon the law to assist morality. To expect men to practise altruism through disinterested goodwill is only a dream of the mystics, who refuse to see that self-interest is the only force by which the human machine is worked. Nothing less than the threats of the law are needed for the prevention through fear of every action contrary to the public good, and if it were not for the honour and esteem by which the public repays services rendered to it, heroism would disappear. But if morality cannot do without the support of the law, the law, on the other hand, must turn to morality for instruction. According to Hobbes, it is enough if the decrees of legislation are upheld by force, but Helvetius demands that these decrees be further justified by reason, that is to say, that they

be always in accordance with the interests of the people (*De l'Esprit*, II, 17). Is not this, moreover, the surest way of causing force to be on the side of the law? To sum up: according to Helvetius, self-interest demands a sanction for all the rules of morality. This sanction acts by way of restraint or of opinion. "Reward, punishment, honour, or disgrace being all in the dispensation of the legislator, are four kinds of divinities by which he may always promote the public good" (*Ibid.* II, 22). The sanction of opinion differs only in appearance from the legal sanction, for the decisions of the former also represent the thought of the legislator, who, by education, directs and forms men's consciences, and thus gives to morality its watchword.

Bentham : Moral Arithmetic ; General Happiness.

Bentham, who was a disciple of Hobbes and of Helvetius, and a jurist as well as a philosopher, gave by his profound analysis of the different kinds of pleasure, a new development to utilitarianism, the principles of which he, moreover, applied to jurisprudence. The maxim, which according to him should be the starting point in our moral judgments, is derived from the consideration of the consequences of our actions. Those actions cannot be called good to which we are moved by a blind impulse of sympathy, but only those whose pleasurable consequences we know, that is to say, which we foresee will result in pleasure for us, or at least in more pleasure than pain. There is, it is true, says Bentham, a strange doctrine, called asceticism, which represents pleasure as an evil, pain as a good. There could not be a more absurd paradox. Every pleasure, were it the most abominable pleasure of the vilest of criminals, is in itself good, and is bad only owing to a circumstance external and collateral to it, namely, the risk of painful consequences which it involves. Although all pleasures are good, they are not all good in the same degree, and in order to attain happiness, that is, the largest sum of pleasure possible, morality teaches us to make a choice between them, and to regulate this choice, according to the quantity of happiness which each one represents. The determination of the comparative value of pleasures is the object of a science which Bentham hoped to found, and which he calls *moral arithmetic*. In this

science, pleasures are to be considered, in the first place, with respect to intrinsic circumstances, which add to or diminish their value; these are their *intensity*, *duration*, *certainty*, *propinquity*, *fecundity*, *purity*—a pure pleasure means, with Bentham, one that is not mixed with pain. His moral system, in quest of the greatest pleasure, chooses the one that corresponds to the best combination of these divers, and often contrary relations. But it is not enough that one pleasure should in itself be preferable to another, it must further appear to be so to him who is pursuing it. Views of pleasure do actually differ, according to climate, temperament, age, sex, character, habits, the development of the mind, and in general all those things by which the emotions are modified. These elements also belong to the data of the problems of moral arithmetic.

Finally, the social consequences of our acts are, in Bentham's view, those which it is right to consider most especially; because the social interest outweighs individual interests, seeing that it embraces them all. Now, men seldom measure the social consequences of actions; in a theft we only perceive the wrong that is done to the person robbed and indirectly to his family; we do not notice the evil effect of the alarm caused by the crime, the yet greater evil which will result from the bad example; still less do we suspect the disorganization of society which every act contrary to the law tends to produce. But if, as Bentham says, the individual interest blends with the general, if we are to adopt as our ultimate ethical formula the greatest happiness of the greatest number, what a series of considerations is involved in the smallest voluntary decision! For instance, private conduct is bound to be in conformity with the law of political economy, and Ethics then becomes a vast, complex science which embraces Sociology. In order to know our interest and to make our actions conformable to it, it was found necessary to undertake a psychological study of the emotions, and thence to deduce rules for the classification of pleasures; now we must further dive into the intricate mechanism of social interests into which the lesser interests of individuals are merged.

But among political sciences the science of Jurisprudence is the most closely connected with Ethics. The laws are

provisions made in order to ensure to citizens the greatest sum of happiness possible. Like the rules of morality they refer to the interest of all. It is their utility that constitutes their justice, and their degree of excellence is measured by the advantage which the public derives from them. The system of penalties inflicted by the law is justified by the same reason. All pain is indeed an evil, but this evil is less than that which it is intended to prevent. While utilitarianism condemns as a useless suffering expiation pure and simple, which Plato advocates in the name of justice, it approves the punishment which the magistrate dispenses not in order to satisfy a desire for vengeance, but to prevent or to make less frequent the recurrence of guilty actions. Moreover, the pain of the punishment should be less than the pain caused by the offence. The law is at once based upon and limited by utility. Legislation serves the ends of morality by so combining the motives which should determine men's desires, as to make them tend to their greatest good. But the sphere of action of the law is narrower than that of morals, and this is the distinction between them: for laws as a rule can do nothing to prevent either those bad actions which are their own punishment, or those which opinion disapproves, or again those which religion condemns. That he may not waste his power in fighting abuses which he is unable to prevent, the legislator in such cases should leave everything to custom, to the habits and to the prevailing religion, all of which are precious auxiliaries, whose support it is, moreover, his interest to gain. In this practical and sensible advice we recognize the jurist who, while building up an ethical system, has in view, above all, the reform of the law.

Morality of Sentiment: Moral Sense; Moral Instinct. Adam Smith: Sympathy.

The doctrine of moral sentiments, in opposition to utilitarianism, denies that there is only room in the human mind for self-love, and takes the sentiment which is the exact opposite of self-love, namely sympathy, to be the guide of moral life. Shaftesbury (*Inquiry concerning Virtue and Merit*), the first representative of this doctrine, discovered the existence of a moral sense which perceives the good and evil in actions, as

sight perceives whiteness or blackness in objects. This delicate sense finds more sweetness in the subtle joys of self-sacrifice than in the brutal satisfactions of egoism. By trusting to its guidance we shall find happiness without seeking it, in the practice of kindness and disinterestedness.

This doctrine of Shaftesbury was developed by Hutcheson (*Inquiry concerning the Original of our Ideas of Virtue: System of Moral Philosophy*). He maintains that the Good and the Beautiful are immediately perceived by means of two special senses, which differ from sight and other senses only in that they are internal. Laying down as a principle the pre-eminence of our moral sense, Hutcheson assigns to it the direction of our faculties. For the rest this sense is with him nothing else than the instinct of benevolence. For he only values actions inspired by disinterestedness: and although he allows that some actions dictated by self-love are innocent and may be forgiven, he never calls them good.

Hume's ethical doctrine (*Inquiry into the Principles of Morals*) was original, but was at the same time connected with the preceding. He refers the perception and the pursuit of the good to an instinct. This instinct is not the instinct of self-love, which reveals to us our own good only, but humanity, which is a "feeling for the happiness of mankind." According to Hume the good is equivalent to the useful, not to the private utility of the agents, but to utility in general. If our benevolent affections have a higher value than our selfish inclinations, it is not by virtue of their intrinsic nature, but of their greater utility; for the former tend to the good of all men, whereas the latter aim only at the good of one individual. Private virtues have their own worth, and we rightly esteem skill and prudence, but benevolence and justice should be preferred to them, so that the lesser utility should not prevail over the greater. Hume's doctrine would appear to be merely utilitarian like Bentham's, but the rule of universal happiness is given by him, not as the result of reason, but on the faith of an instinct, and in Ethics he would have us follow the promptings of the heart. It is feeling that draws us to the general happiness, and it alone can explain moral blame or approbation.

The theory of moral sentiments appears in its most ingenious

form in the system of Adam Smith, who founded the rules of conduct on the psychological laws of sympathy. By *sympathy* Adam Smith means the communication to our minds of all the feelings of others. He remarks, for instance, that it is impossible to witness the sufferings of others without being affected by the contagion of this suffering; that we cannot hear a child's laughter, or watch the gambols of an animal, without being instinctively moved to take part in their frolics and games. Nature has thus joined us in a fellowship with other men, so that their pleasures and their pains become our pleasures and pains. Nature has so willed it, moreover, that this feeling of sympathy should not fail to bring pleasure, and it may be sought for its own charm. According to Adam Smith this fact in itself suffices as a foundation for morality. It might seem, it is true, that the mind must be affected by the evil as well as by the good emotions of others, but this is not the case. The heart when it follows its natural inclinations is always drawn to the good. We are less moved by the passion of a violent man than by the gentle and patient resignation of the victim of his rage; but if it is a question of virtuous indignation caused by horror of vice, we are on the side of him who feels it, and not on the side of him who is the object of it. Speaking generally, the impulses of sympathy are always towards what we call morality, which is merely the expression of the laws of sympathy. Consequently the following may be laid down as a practical maxim: We should have only those sentiments and should perform only those actions which ought to bring the approbation of our fellow-creatures and gain their sympathy.

But what is the nature of the sympathy which we ought to deserve? What are its characteristics? It should, in the first place, be *pure*. Those actions alone are absolutely good which excite in us an unreserved or unqualified sympathy. Those which leave a mixed impression may be regarded with suspicion. Adam Smith adds that this sympathy should be universal, it is not enough to win the admiration of a friend, or of a small circle, we should deserve to be admired by all men. Sometimes even we should act in opposition to prejudice and face public censure, in order to obtain from posterity, which is the only equitable judge of conduct, a tardy but universal sympathy, and one that will last for ever. For the value of

our actions is in proportion to the amount of approbation we obtain, and it should be our ambition to extend as far as possible the circle of those who feel affection for us. Jouffroy sums up the Ethics of Adam Smith thus:

"The goodness of an action is in direct proportion to the approbation which it excites in other human beings, and the best actions are of such a nature as to obtain the most pure and universal sympathy possible, in other words a sympathy unmixed with antipathy, and felt not only by a few men but by the whole of humanity."

If the actions of others did not sometimes excite in us sympathy and sometimes antipathy, we should have no conception of the moral value of our own actions. A man alone in the world would remain ignorant of good and evil, for it is after we have judged others that we judge ourselves. Experience has taught us what impressions our actions and our thoughts would make on others if they were known. Our imagination can always supply witnesses to our actions; more than this, we are at once the spectators and the performers of our own actions, and we sympathize with our own sentiments as we should with those of others. If we observe our own actions as disinterested spectators, and if we grant them the same degree of approval as we should to the actions of others, the approbation which we feel for ourselves will be equivalent to that of our fellow-creatures. Let each one of us then be an *impartial spectator* of himself, and let him value the goodness of his actions according to the amount of sympathy that he finds in his own heart for them.

Adam Smith's critics remark that after all he refers us to conscience. Nevertheless, even while he substitutes the impartial spectator for the sympathy of men in general, Adam Smith extracts this second criterion from the first; even what is called duty he regards as born of sentiment, and the rules expressing it are only generalizations of particular decisions made by the sympathetic instinct (Jouffroy, *loc. cit.*). When the impartial spectator has once approved of certain conduct, what use is there in consulting him in similar cases in the future? We adhere to the rule which embodies our past experience, and this is called acting according to duty. Thus, although he practically substituted for sympathy the rule of duty, or, the decision of the impartial spectators, Adam Smith

still remains in theory true to his principle, for he derives both of these from sympathy.

Kant: Morality based on the Idea of Duty; Transition from the Form of the Law to its Matter; Autonomy of the Will.

So far, as we have seen, philosophers have made morality rest on the notion of the Supreme Good, which includes both virtue and happiness. Kant, while recognizing that the highest good consists of these two elements, makes a distinction between the Supreme Good, properly so called, and the moral good. Morality implies absolute disinterestedness, and it does not appeal to feeling; it imposes itself directly upon the will, and has therefore nothing to do with the idea of happiness. The Supreme Good is only a *desideratum*. Morality implies, indeed, as its *postulate*, a future life which would permit of harmony between virtue and happiness, but this is the consummation of morality, not its foundation. In the second place, before Kant, philosophers treated the idea of law as subordinate to that of the Good. We should, they taught, aim at that which our reason reveals to us as our good. We are determined by a rational ideal, or an end that is consonant with our sensible nature. The originality of Kant's ethical doctrine lies in his deduction of the notion of good from the notion of duty, in his derivation of the contents of the law from the "form of the law. To him belongs the merit of having first given due clearness to the current notion of *law* or *duty*, and of having founded on this principle a new conception of the moral life. •

The only thing that can be called good without reservation is, Kant tells us, the Good Will. The best gifts of nature or fortune may prove useless, or even pernicious, but a will does not owe its goodness to the end it seeks. It is good in itself, and shines with its own splendour, like a precious stone which derives none of its worth from its utility. Nor is a volition good on account of the natural disposition by which it may be determined, even if this be in itself good. An action, however praiseworthy, if it springs from a natural inclination or lively sympathy, is, nevertheless, not a moral action. It may be worthy of praise; it is desirable that such actions should be encouraged; it may be a beautiful

action, but it is not morally good. The distinctive characteristic of the good will does not lie in its end, nor in the merit of the will itself, but in the principle according to which it acts, and in its relation to this principle. Now this principle must not be drawn from feeling, but from reason: it must not be material but formal; otherwise, the principle would be identified with the end, or with the motives of the action, and consequently would still lack the character of being moral. Finally, this principle should apply not only to every human will, but to every rational being. In a word, this principle is *a priori*, though it still belongs to practical, not to speculative reason. It is *duty*, which we shall now proceed to examine more closely.

• If we were to imagine a will that is not necessarily governed by reason, but is divided, and alternately determined by formal principles and material motives, that is, by reason and by sensibility, such a will is not absolutely good. And, as it is not always or by nature, obedient to reason, the will is in a manner constrained, although only by an entirely moral necessity, to obey reason. This compulsion of the will by reason is what Kant calls an *imperative*. There are several kinds of imperatives. Those which demand a certain action, not for the sake of the action itself, but for the result to be obtained through it, are *hypothetical imperatives*: for example, the prescriptions given by doctors to cure the sick, or those of the poisoner to kill his victims, are all imperatives, but they are conditional or hypothetical imperatives, that is to say, they are subordinate to certain ends, and in this respect are all equally good and useful. In general, the maxims connected with the fulfilment of our desires, and of the strongest of our desires, which is the desire for happiness, are hypothetical imperatives. The formula for this class of imperatives is the well-known maxim, "Who wills the end wills the means."

But there is an imperative which commands an action, not for the sake of the result, but for its own sake, and which has relation only to the principle and the essence of the action; this is the *categorical imperative*, the imperative of morality, and its formula is, "Do your duty, come what will." The first kind of maxims are, in reality, only *counsels* or *rules*; the categorical imperatives alone deserve the name of *laws* or *commands*. It

is evident that these rules, of skill, the counsels of prudence, refer always to a certain end, and have value only in so far as one knows the end and adapts them to it. The *practical*, that is, the *moral laws*, on the contrary, impose themselves upon us and determine the will to action without regard to the result. They are immediately evident, so that as soon as the will perceives these laws, it knows that, as will, it must obey them. But this implies that these laws impose themselves on every will, of whatever kind; so that the distinctive characteristic of these laws is their *universality*, and they may be resolved into the following formula: "Act on a maxim which thou canst will to be law universal." Universality is a sign by which we can infallibly recognize the law of duty; for though each one of us, when he violates this law, is willing that there should be an exception made in his own case, as not being of great consequence, still he cannot will that the law should not exist; for he would not consent to have it violated by others in their dealings with him, in the same way as he violates it himself: for instance, he who robs his neighbour willingly allows himself this infraction of the law, but he would not admit that it is in a universal and absolute way permissible to take what belongs to another.

So far, however, we have only arrived at a formula which expresses the law: we do not yet know anything of its contents. Every action has an end, even those which do not seem to be done for an end; but we must distinguish *material* ends, or the particular objects of desire, which are all relative to the particular nature of the faculty of desire, and the *formal*, or *objective* ends, which reason sets before every rational creature as the absolute object of duty. The relative or subjective ends give rise to the hypothetical imperatives, to those, that is, which command us to seek means which are relative to certain ends, themselves also relative. Objective ends are expressed in a categorical imperative, which commands an action as having an absolute worth on account of its relation to an absolute end.

Now every rational being is an absolute end, that is to say, he should never regard himself as a means, but always as an end. Every time, for instance, that a man follows his inclinations rather than his reason, he treats himself as a means; but

to be means is the peculiarity of *things*. *Persons*, on the contrary should never be treated this way; they are *things-in-themselves*, and on this account inviolable, and should be respected by every other will, as well as by themselves. This restricts, indeed, the liberty of each individual, but at the same time it protects him, and causes man to be respected by his fellows.

The first formula given by Kant is thus transformed and must be expressed in these terms: "Act so as to treat humanity, whether in thyself or in another, always as end, and never as means." According to this formula our actions should not only not profane humanity by violating its rights, but should also be in harmony with humanity, that is, should tend to its perfection and improvement. From this follows the distinction between acts of perfect and imperfect obligation.

But as long as we regard the principle of morality as an external law to which the will is subject, it is impossible to understand why the will should simply obey it without being determined by some force or attraction, which would destroy the universality of the law. Hence the universality of the moral principle is comprehensible only on condition that it is not only a law of the will, but a law that the will wills and contains within itself; in a word, on condition that it is a voluntary law of rational beings.

Thus Kant conceives a "kingdom of ends," that is to say, a certain ideal which includes all rational wills, these being ends in themselves, and treating one another as such; and they are ends in themselves only because they have themselves instituted a law, and at the same time established it for all rational wills. This is what Kant calls *the autonomy of the will*: it is this privilege of participating in the institution of the universal laws, and of only being obliged to obey laws that are universal and that nevertheless the rational being contains within himself, which alone gives to him an intrinsic and absolute value. This new characteristic of the moral law is expressed by a new formula, "Act in such a way that the will can regard itself as in its maxims imposing universal laws."

Kant's ethical doctrine is to be summed up in the following three principles: (1) *The categorical imperative*, (2) *Humanity considered as an end in itself*, (3) *the autonomy of the will*.

The separation of the idea of duty from all interested motives; the absolute obligatoriness of the law, quite apart from its end; the universality of this law; man regarded as inviolable, inasmuch as he is a free and rational being; finally, the law itself as having its principle in the inner being and essence of the moral agent, and never as the result of a force or power that is external and not ratified and confirmed by the *dictamen* of conscience: these are the principles containing the essence of his conception of the moral life, which is entirely built up on the notion of duty, on the form of the law.

John Stuart Mill: Difference of Quality in Pleasures; Egoism and Altruism.

Since Kant the ethical problem has not been neglected; for the human mind will never cease to inquire into its own nature and its own destiny. But however interesting the more recent enquiries may be, we shall here content ourselves with giving an account of the developments which Utilitarian ethics owe to the work of J. S. Mill and Herbert Spencer. Mill tries to prove that Utilitarianism can account for the moral traditions of mankind, that it can satisfy the noblest minds, and can without inconsistency be made the basis of a scheme of social ethics. This is how he formulates the principle of Utilitarianism:

"The creed which accepts as the foundation of morals utility, or the Greatest Happiness principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure and the absence of pain; by unhappiness pain and the privation of pleasure" (*Utilitarianism*, p. 9).

We are not told whether it is here a question of the happiness of the individual or of universal happiness. The moral ideas revealed to us by conscience are not contrary to this principle, for it is easy to give such a psychological explanation of these ideas as will prove that they have their origin in the pursuit of happiness.

"Life would be a poor thing, very ill provided with sources of happiness, if there were not this provision of nature by which things originally indifferent, but conducive to, or otherwise associated with, the satisfaction

of our primitive desires, become in themselves sources of pleasure more valuable than the primitive pleasures, both in permanency, in the space of human existence that they are capable of covering, and even in intensity. Virtue, according to the utilitarian conception, is a good of this description. There was no original desire of it or motive to it, save its conduciveness to pleasure, and especially to protection from pain. But through the association thus formed it may be felt a good in itself, and desired as such with as great an intensity as any other good" (*Utilitarianism*, p. 55).

Thus, through the laws of association we come to like for their own sake things which we originally only liked as means to ulterior ends. The miser loves money for its own sake, owing to the pleasant notions associated with its possession. We have come to love virtue as the miser loves money; and all our other moral sentiments—remorse, satisfaction, repentance—though seemingly simple sentiments, are in reality made up of analogous associations.

Let us see how this theory would affect private and social life. Mill maintains that Utilitarianism is reconcilable with the demands of human dignity, and, introducing into the comparison between pleasures a new element, namely, that of quality, he substitutes for Bentham's moral arithmetic a kind of *aesthetic of pleasure*.

"It would be absurd that while, in estimating all other things, quality is considered as well as quantity, the estimation of pleasure should be supposed to depend on quantity alone. If I am asked what I mean by difference of quality in pleasures, or what makes one pleasure more valuable than another, merely as a pleasure, except its being greater in amount, there is but one possible answer. Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, irrespective of any feeling of moral obligation to prefer it, that is the more desirable pleasure. . . . Now it is an unquestionable fact that those who are equally acquainted with and equally capable of appreciating and enjoying both, do give a most marked preference to the manner of existence which employs their higher faculties. Few human creatures would consent to be changed into any of the lower animals, for a promise of the fullest allowance of the beast's pleasures; no intelligent being would consent to be a fool, no instructed person would be an ignoramus, no person of feeling and conscience would be selfish and base. . . . A being of higher faculties requires more to make him happy, is capable probably of much more acute suffering, and certainly accessible to it at more points than one of an inferior type; but in spite of these liabilities he can never really wish to sink into what he feels to be a lower grade of existence" (*Ibid.* p. 11 sq.).

Thus some pleasures are in fact higher than others, and if we are to believe Mill, these pleasures are preferred to others by those who know them, and should consequently be preferred by all men.

But if our individual happiness is to be our end, is it not to be feared that the conflict between individual interests will be detrimental to the peace of society?

"The utilitarian standard," Mill replies, "is not the agent's own greatest happiness, but the greatest amount of happiness altogether" (p. 16). "I must again repeat what the assailants of utilitarianism seldom have the justice to acknowledge, that the happiness which forms the utilitarian standard of what is right in conduct is not the agent's own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator. In the golden rule of Jesus of Nazareth we read the complete spirit of the ethics of utility" (*Ibid.* p. 24).

But do we not here come upon the difficulty inherent to every form of Utilitarianism? In the name of what principle are we to demand this self-sacrifice on the part of the individual? How can disinterestedness be made to grow out of interestedness? J. S. Mill solves this difficulty in the following way: Egoism is fundamental in human nature: 'altruism itself is only a form of egoism. Altruism as a necessary condition of social life should be encouraged, and the surest way to do this is to associate it with self-love. Egoism, as it was the beginning of altruism, should also develop and complete it. In the first place, let the idea of crime be associated with the idea of punishment, through the legal sanction, and the fear of one will produce horror of the other. In the second place, "education and opinion, which have so vast a power over human character, should so use that power as to establish in the mind of every individual an indissoluble association between his own happiness and the good of the whole; especially between his own happiness and the practice of such modes of conduct, negative and positive, as regard for the universal happiness prescribes" (*Utilitarianism*, p. 25).

Lastly, and above all, society should be so organized as to insure a real harmony between the interest of each and the interest of all. In such a perfect society no one could

conceive the possibility of personal happiness as a consequence of a course of conduct that was opposed to the general good. This golden age, this "*issue hors de la civilization*," as Fourier calls it, is the ideal, the last word of Utilitarianism, which can neither be logical nor sincere unless the individual and the universal interests are made identical. But how to do this is just the problem.

Herbert Spencer : Inevitableness of Ethical Evolution.

Mill's Ethics were founded on psychology, and in his system the individual and society are considered apart from the rest of Nature. Herbert Spencer, on the other hand, treats Ethics as a branch of cosmology. Humanity with him is only a part of a vaster system, and manifests, in its own sphere, laws which govern the world. It is included in the movement of things, and the evolution of man is only a part of the universal evolution. Progress is not an accident but a necessity; civilization, far from being a product of art, is merely a phase of nature like the development of the embryo, or the opening of the flower.

The opponents of Utilitarianism urge against it the impossibility of reconciling individual interest with the universal good; but by virtue of the laws of evolution, given the fact of social life, altruism must necessarily come out of egoism, and, owing to heredity, the altruistic sentiments must ever predominate more and more. Most of J. S. Mill's psychological analyses are, Spencer says, correct, but they must be completed by taking into account the laws of evolution and by considering the individual in the species, and the species in nature.

"Pleasure, somewhere, at some time to some being or beings, is an inexpugnable element of the conception [of morality]. It is as much a necessary form of moral intuition, as space is a necessary form of intellectual intuition" (*Data of Ethics*, Chapter III, p. 46).

Still pleasure is itself only a *sign*. Physical pleasure, for instance, is the sign by which the best adjustment of the acts of the animal to his vital functions is manifested in consciousness. Vital activity is the cause of pleasure. Vital activity, characterized by the pursuit of an end, is the humble starting point of human conduct. The laws governing the evolution of life, which is a transition from the

indefinite to the definite, from the homogeneous to the heterogeneous, apply therefore to human conduct. The moral life has a characteristic unity and coherence, it is in harmony with itself, *sibi constat*; whereas immoral conduct is incoherent, that is to say, it consists in actions that are inconsequent and contradictory. The life that we call moral is, moreover, varied in its activity. The life of a married man, which is morally superior to that of the celibate, is, besides, more heterogeneous and complex. So also is the life of a generous man or of one who takes part in politics, as contrasted with that of the egoist or the private individual (Chap. V). The progress of morality is therefore merely the progress of the adaptation of human life to its constitutive laws. The principle of moral actions consists exclusively in the consideration of their natural and intrinsic effects. There is no need to appeal to the feeling of obligation, since, when moral evolution is completed, the good is realized with pleasure.

"Evidently then, with complete adaptation to the social state, that element in the human consciousness which is expressed by the word obligation will disappear. The higher actions required for the harmonious carrying on of life will be as much matters of course as are those lower actions which the simpler desires prompt. In their proper times and places and proportions, the moral sentiments will guide men just as spontaneously and adequately as now do the sensations" (*Ibid.* VII, 46). . . . "The moral conduct will be the natural conduct" (*Ibid.* 47).

And as private morality is merely the result of the development of life and of its progressive adaptation to necessary conditions, so also will a perfect state of society eventually be established as the effect solely of natural laws and cosmic evolution. That agreement between individual and universal interest, which was the dream of Mill, will be automatically realized. The pursuit of this remote ideal is even now our interest. As belonging to the same species, we should work towards the foundation of the best form of society. But, in any case, it will come to be, whether we desire it or not. Good, in time, will come out of the natural laws, just as evil does at present. Thus egoism is now the first law of nature, the first duty is self-preservation, and self-love is the highest virtue; but when political economy has provided for the satisfaction of the wants of all, the present conflict of

interests will no longer be possible. The joys of altruism and self-sacrifice will then alone have any attraction, and there will be on all sides rivalry in altruism, each desiring to bear the burden of self-sacrifice and refusing to reap its advantage.

And so the ethical ideal of which we only dream to-day is in process of being realized merely through the action of the laws of nature, for it is the consummation of our evolution. Naturalistic ethics concludes by harmonizing with the morality of duty; but its conclusions are the result of a kind of fatalism like the *fatum Mahometanum*, according to which things will come to pass in any case and without human interference. Nothing could be more convenient to each individual than this theory, since it allows him to yield to all his passions, knowing that progress will go on just the same, and that the supremacy of good will be in any case effected by natural forces.

Conclusion.

Let us now see what conclusions can be drawn from this long account of the efforts made by the human mind to attain a knowledge of human destiny. The problem is to discover the meaning of life, to determine the principles which can co-ordinate all its acts. And since men can only be satisfied with that sovereign good which includes both virtue and happiness, it has ever been the object of moralists to reconcile these two terms which seem irreconcilable, but which cannot be separated without violation to the intelligence. Some philosophers reduce happiness to virtue, others teach that virtue coincides with happiness. But both these solutions are perpetually being contradicted by the facts of life. For man is not an isolated and independent being. He lives in the midst of society, and is therefore largely dependent upon his human environment; he lives in the bosom of nature, and his acts are only a fragmentary part of the immense life which surrounds him on all sides, which extends far beyond his sphere of action, and in which he is nevertheless included and involved.

Thus when they reflect upon human life, moralists are led to consider also the universal life. To those who hold that the physical depend on the moral laws, our present life is unintelligible only because it is not a whole but a part. The

other school, as we have seen, regard the moral laws as being themselves merely physical laws, which by a necessary evolution, are in process of bringing about human morality, and therewith the ideal harmony between egoism and altruism, between happiness and duty. But the question is, whence do physical laws derive the power of becoming moral laws? By what force is egoism transformed into altruism? Must there not be some motive power, which impels nature to rise above herself? And assuming that, when at last the ideal limit and the end towards which this progress tends has been reached, nature and virtue will be one (for even Kant admits that in the *kingdom of ends* virtue becomes holiness), still, in the interval that lies between us and this ideal state, in our present life in fact, it is through the idea of duty that each step is won, it is this notion alone that prompts the effort without which there can be no progress.

PART III

METAPHYSICS

CHAPTER I

SCEPTICISM AND CERTITUDE

THE first inclination of the human mind is to act without questioning itself. In the beginning of mental life the distinction between thought and the object of thought is not clearly perceived. But man falls into error, and the moment he becomes conscious of this, his mistrust is awakened. When later he discovers the contradictions of human opinions, his confidence is still further shaken. Then thought, which was at first directed to external things, turns upon itself. And as soon as we begin to reflect upon our own thought, to speculate as to its value, we have reached the first period of doubt, and whether we are to get beyond this stage or not, we are henceforward obliged to face the most formidable of all philosophical problems: Is the human mind capable of attaining certitude? Have we the right to expect it?

Every system of philosophy is a direct or an indirect answer to this question. The Dogmatists in diverse ways affirm the harmony of thought and its object. They recognize, it is true, the existence of two terms, the *ego* and the *non-ego*, matter and mind, but they are terms between which thought itself constitutes a natural connection. The Sceptics deny the possibility of knowledge: they either oppose the mind to the object which it strives to know but can never reach; or, imprisoning thought within itself, they seek to discourage it by the spectacle of its own contradictions. Lastly, seeing the impossibility of vindicating knowledge if we accept the existence of an object opposed to the mind and having nothing in

common with it, or into the essence of which it is, to say the least, impossible to penetrate, the Idealists derive from the subject itself the object of knowledge, and admit nothing as real but the intelligible. Between these extreme theories we find intermediate solutions, in the history of which we see the efforts that have been made by the mind not to yield its dominion altogether, while yet allowing its own place to scepticism.

Pre-Socratic Philosophy: Antithesis between Sensible and Rational Knowledge. The Origin of Sophistry. Sophistry and the Law of Contradiction.

At the first awakening of Greek thought the question did not yet present itself, so that it can hardly be said that any solution of it was given. There was, however, an entirely instinctive, spontaneous, or, so to speak, unconscious solution, in which we recognize the natural and primitive tendency of the human mind, and which is implied in the very fact that the problem did not exist. The mind had before it the world of nature, and did not yet consider itself as a separate thing. The Pythagoreans and the Eleatics, Empedocles, Democritus, and Anaxagoras all attempted an explanation of nature, but never thought of raising any doubt as to our means of knowing it; philosophy, at this first period, was an unconscious dogmatism.

No doubt this dogmatism was not without some reservation. Xenophanes complains of the difficulty we have in discovering truth, and he adds, that even, when by chance we 'come upon' (τύχοι) the true, we are never sure of possessing it; δόκος δ' ἐπὶ πᾶσι τέτυκται. Nevertheless Xenophanes sets forth, with the most complete conviction, his own views concerning the gods. We find the same complaint and the same dogmatism in Empedocles (V, 36 sq.) and in Democritus (Sext. Emp. Adv. Math. VII). But we must not attribute to these ancient philosophers the theories that would seem to be implied in some of their principles. Because Heraclitus affirms the union of contraries, we must not, like Aristotle (*Metaph.* X, c. 5), accuse him of having denied the law of contradiction, and hence the possibility of any certitude. He had no idea of the law of contradiction; he had not even a clear notion of what a contradiction is.

But even in the dogmatism of these early thinkers we can discern germs, which, when developed, were to give rise to Sophistry. All the philosophers after Parmenides and Heraclitus arrived at the opposition between knowledge and opinion, between rational and sensible knowledge. The operations of thought lead to results that are in evident contradiction with the testimony of our senses; and hence we must decide between the concrete data and the abstract products of thought. Heraclitus and Parmenides, Democritus, Empedocles, and Anaxagoras, agree in denying the veracity of our senses (see Vol. I., Chap. III. *The Senses and External Perception*). Now, by rational knowledge all these ancient philosophers understand, not *a priori* data, but the operations of thought upon the data of sense. Was it not evidently a dangerous process for dogmatism to establish in this way a difference in value between rational and sensible knowledge, without distinguishing their origin? What right had they to allow to a knowledge that was derived, an authority they denied to primitive knowledge?

And this was not the only side on which these systems laid themselves open to the attacks of the Sceptics. For Greek philosophy before Socrates was not only a dogmatism, but a physical dogmatism. Sensible knowledge was therefore not only the starting point of the whole of this philosophy, but the condition of its existence; and a philosophy that was led by its own results to dispute the worth of this knowledge destroyed the very principles on which it rested.

Besides this contradiction, which is inherent in all these systems, there was another which resulted from the disagreement between the systems themselves. Parmenides denies Becoming and the Many; Heraclitus sees in nature an infinite multiplicity, and a perpetual Becoming; Democritus attributes perpetual motion to his atoms; Anaxagoras finds it necessary to introduce an independent moving cause, namely, intelligence. The day had to come when the human mind, weary of these endless inquiries into the nature of things, would review the results arrived at by these researches. Then was suggested the oldest argument of Scepticism, namely, that from the contradictions among human opinions.

Thus it became an amusement to set the hypotheses of the different philosophers against one another. Contradictions

were pointed out on every hand: between Parmenides and himself; between Parmenides and Heraclitus; between both of them and common sense. This clashing of contradictory ideas and arguments gave birth to Sophistry. The peculiarity of this form of scepticism is that it did not take the trouble to seek for any scientific basis. It did not invent its arguments, but borrowed them from former systems, and was content to develop them with a certain amount of skill. Some Sophists started from the doctrine of Heraclitus, others from that of the Eleatics, and from such opposite points of view they all arrived at the same conclusions.

Protagoras takes up the thesis of Heraclitus: everything is always in motion. It is only as objects move towards one another and mingle that they become something determinate; therefore it cannot be said that they are something, or even that they are at all, but only that they are becoming something. This theory applies as well to our knowledge. We are a variable term standing in an infinite number of relations to other objects. Things are to each man only what they appear to him to be, and they appear to him such as they must appear, given his peculiar state. "Man is the measure of all things, of those that exist and of those that do not exist." Upon such a principle no knowledge is possible; there is no escape from a chaos of contradictory opinions.

Gorgias adopts the argument of the Eleatics, but what they asserted only of multiple and changing being he applies to Being in general, and arrives at this threefold conclusion: 1st, there is nothing; 2nd, if there were anything we could not know it; 3rd, and if we could know it, we could not teach it to others (*Sext. Emp. Adv. Math. VII, 77 sq.*). This was more than Scepticism, it was absolute Nihilism.

Sophistry arose out of a dim consciousness of the law of contradiction. Though this principle was first formulated by Aristotle, the Sophists at least contributed towards its discovery. They had a notion of it as the criterion of truth, and in this way Sophistry was to a certain extent legitimate and fruitful. It showed the contradictions of the philosophers of the past, and it imposed on those of the future greater clearness and coherence in their systems, besides pointing out the necessity of commencing with a critical inquiry into the possibility of

knowledge. So far, Sophistry had its *raison d'être*; where it was wrong was in its hasty conclusions as to our radical incapacity to reach truth. It brought about its own destruction by violating the law of contradiction, in the name of which it had been founded. Sophistry went beyond doubt and negation even, and professed to maintain at the same time the most contradictory propositions. Thus it lost its hold on contemporary thought and provoked a reaction. In their dim conception of the law of contradiction lay the real strength of the Sophists, and it was by means of this law that Socrates brought about their ruin.

Socrates: Concepts the Objects of Knowledge; Subjective Certainty. Plato: Concepts and Ideas; Objective Certainty.

While attacking the Sophists, Socrates in a certain sense carried on and completed their work. Philosophers deceive themselves, and we ourselves are deceived by our senses. From this the Sophists inferred that knowledge is impossible; but Socrates, on the other hand, infers only that it was impossible to reach science by the road hitherto taken, and he seeks a new method. Sensible knowledge by itself leads to contradictions, because it only shows us one aspect of things, the changing and fleeting surface. There is no science of the particular or accidental. Science has for its object the universal (Arist. *Met.* XIII, 1078 b, 17). It consists precisely in determining the concept, which reconciles apparent contradictions, and brings them to the unity of a single notion (Xenophon, *Mem.* IV, ii, 11). The object of the science of courage, for instance, is not a certain act of courage, but what is common to all courageous acts; it is one notion which is in the mind of all men when they use the word *courage*; it is the answer to the question, *τί ἐστιν ἡ ἀνδρεία* (*Ibid.* IV, vi, 15). Thus it is on concepts that Socrates re-establishes knowledge; these for him contain the principle of certainty. *ἐπὶ τὴν ὑπόθεσιν ἐπανῆγε πάντα τὸν λόγον* (*Ibid.* 13).

The criterion of certitude is that it puts an end to sophistical discussions, that it brings a man into harmony with himself and with others: *ὁπότε δὲ αὐτός τι τῷ λόγῳ διεξίει διὰ τῶν μάλιστα ὁμολογουμένων ἐπορεύετο, νομίζων ταύτην ἀσφάλειαν εἶναι λόγου*. "Socrates also thought that those who knew the

nature of things severally would be able to explain them to others" (*Ibid.*).

Socrates gives a reply to the arguments of the Sophists, but he does not attack the principles of scepticism; he asks himself *how* we can reach knowledge, but not *if* we can reach it. He does not question the possibility of arriving at certainty, but is only concerned in defining the manner in which it is to be sought. His philosophy implies a full belief in the possibility of knowledge, a belief which was both instinctive and profound, and which it did not occur to him to justify. With him, however, the conception we should form of knowledge becomes the first problem in philosophy. But his solution remained incomplete. Knowledge rests on concepts; this is enough for subjective, but not for objective certainty. Are things in themselves such as our concepts represent them to be? This postulate of which Socrates had not recognized the necessity was affirmed by Plato.

It is owing to Plato that certitude acquired an objective value. Our concepts exist outside ourselves. The true reality dwells in our *objectified* concepts, in notions, in the *Ideas*. Our concepts are, then, not only the principles of knowledge, but of existence itself. The ideal theory is a theory of certainty. To the question, how our concepts can be at once the types and images of reality, Plato replies by his theory of innate ideas. It is evidently not our concepts themselves, considered from the point of view of the individual, that determine reality. The Ideas, the principles of being, are not general ideas abstracted from the manifold phenomena (*Phil.* 16 c, *Rep.* 596 a), but they are discovered by an immediate intuition which is not the result of the mere elaboration of experience, but the ultimate term of a dialectic method (*Rep.* Bk. VII). The question remains, how does our soul originally obtain these concepts, which are at once the types and the images of reality? To this question Plato answers by his theory of *Reminiscence* (*Phaedrus*, 246 sq.).

We must observe that the possibility of knowledge is not a subject of doubt to Plato any more than to Socrates. What he discusses is the conception that should be formed of true knowledge, never its possibility. The possibility of knowledge is in fact the principle on which the whole ideal theory depends. That knowledge is possible, and that true knowledge

is founded on concepts, was the postulate of Socrates, and Plato deduces its logical consequences. To say that concepts alone constitute true knowledge, or represent that which is, is to say that our concepts correspond to objective reality; in other words, what is intelligible exists, what is not intelligible does not exist, and reality is in direct proportion to intelligibility.

Aristotle: Impossibility of Proving Everything; Intuitive Certainty of the Principles of Knowledge.

Aristotle does not, any more than his predecessors, question the possibility of knowledge. For him as for Plato knowledge deals with concepts, and is a certain knowledge of that which is general and universal τὸ καθόλου. So full was the confidence of these philosophers in the validity of thought, that Aristotle, who expressly attacks the Sceptics, does not even refer to the problem of certainty.

Science is the knowledge of the universal, and according to Aristotle the universal exists only through the particular. It is given to us in sensible reality (*De Anima*, III, viii, 432 a, 2), whence it must be abstracted; and this is the function of induction. When once the universal is known, if our induction has not misled us, we should be able to deduce the particular from it. True knowledge is therefore demonstrative, and demonstration is the criterion of certainty. But will this criterion always be necessary? Demonstration is a syllogism starting from established premisses: will these premisses themselves always require to be proved? To prove everything is impossible (*Met.* 1006 a, 9), for we should have to go on to infinity (εἰς ἀπειρον γὰρ ἐν βάδιζον). The series of intermediate terms is not infinite, and where these intermediate terms end there appears an immediate knowledge, the knowledge of principles. These principles have the double characteristic of being incapable of proof and of not requiring proof (*An. Post.* II, 100 b, 8). They are known with a greater certainty than anything that can be deduced from them. They are the source of the certainty of which deduction is only the channel. The faculty by which they are known is reason (νοῦς), and according to Aristotle this faculty never deceives us (*De Anima*, 429 a, 15-27; 430 a, 2).

This theory of Aristotle is the best answer to a famous argument of the Sceptics—the impossibility of proving everything (*An. Post.* I, 3). But it pre-supposes precisely that which scepticism called in question, namely, the possibility of knowledge. If everything had to be proved, says Aristotle, knowledge would be impossible; what do I care, the Sceptic replies, it is precisely the possibility of knowledge that I dispute, and you answer me by starting from this assumption just as if it were a necessary principle. In fact, Aristotle's whole doctrine is inspired by the idea that certainty is and must be possible. He merely affirms the infallibility of our reason, and this is indeed all that can be done by those who wish to resist scepticism. If we are to find certainty, we must first of all believe in it.

Aristotle was not aware of the difficulty of his position, he was aware only of its strength, for he had that natural faith which is lacking in the sceptic. In order to defend the principle of contradiction, he shows that those who deny it condemn themselves to universal scepticism (*Met.* 1005 b, 11 sq.). To him, as to all strong minds, doubt is repugnant; he has faith in the veracity of his own faculties. He shows that scepticism is contradictory and refutes itself in practical life (*Met.* 1005 b, 25). He attacks it with all the scorn of one who is convinced of the soundness of his own reasons. If his mind, he says of the sceptic, holds to nothing, if he at the same time believes and does not believe what he says, in what does such a man differ from a vegetable? ἔστι δ' ἀποδείξαι ἐλεγκτικῶς καὶ περὶ τούτου ὅτι ἀδύνατον ἂν μόνον τι λέγῃ· ὁ ἀμφισβητῶν. ἂν δὲ μηθέν, γελοῖον τὸ ζητεῖν λόγον πρὸς τὸν μηθενὸς ἔχοντα λόγον, ἢ μὴ ἔχει· ὁμοίως γὰρ φυτῷ ὁ τοιοῦτος ἢ τοιοῦτος ἤδη. Finally, he says, like Spinoza, that the rôle of the sceptic is to be dumb: οὐ τῷ τοιούτῳ λόγος, οὐτ' αὐτῷ πρὸς αὐτὸν, οὔτε πρὸς ἄλλον (*Ibid.*).

After Aristotle the Problem of Certainty is recognized. Stoicism: Subjective Criterion; Tension of the Soul. Illogical Dogmatism of Epicurus.

After Aristotle the speculative interest was made subordinate to the practical. The human intellect, having grown feeble, began to doubt itself, and the possibility of knowledge

appeared as a problem demanding solution. To discover an immutable rule of life and a sure measure of certainty and knowledge were the two questions with which henceforward philosophy was to concern itself (Ravaisson, *Mét. d'Arist.* Vol. II, p. 65).

But knowledge was only a means to happiness and Logic prepared the way for Ethics; and thus the speculative postulate of Plato and Aristotle became a practical postulate. It remained to be seen whether the practical interest really did stand in need of a scientific conception. The Sceptics denied this, and there being no longer any justification or motive for it, science was declared to be impossible as well as useless.

Notwithstanding its dogmatic character, Stoicism already carried within it the germ of scepticism. It already discussed intellectual certainty, and, if it furnished a foundation for it, the foundation was too weak to resist the pressing attacks of the sceptics. This weakness is a result of the gross materialism which was combined in the Stoic system with much that was noble and true.

For the Stoics nothing was real that was not a body, therefore nothing existed that could be known otherwise than by the senses. Sensible perception, however, was not purely passive: it followed the impression made by the object on the soul, and was distinguished from it. Knowledge begins with the assent we give to a representation when we refer it to an object (Sext. Emp. *Adv. Math.* VIII, 397). But what is it that determines this assent? In other words, by what signs do we recognize that a representation is a true one? There are representations which impose themselves on us with such force that we cannot refuse our assent to them, *φαντασίαι καταληπτικαί* (D.L. vii, 46). These representations are in conformity with the reality and express the peculiar qualities (*ιδιώματα*) which distinguish an object from all others (Sext. Emp. *Adv. Math.* VII, 250 sq.). For the Stoics maintain, as did Leibnitz later, that there are not two things in nature perfectly alike; and from this they conclude "that there is, for everything, in every circumstance, one single representation which is infallible and truly comprehensive, and the sole object of the assent of the wise man" (Ravaisson, *Méthaph. d'Arist.*). The real object is recognized by the impression, or shock (*φαντασία ἐναργής καὶ πληκτική*), which constitutes the evidence of its reality. But by what means do we measure the shock, the effect of the tension, which is the special quality perceived? By the energy of the inner force, the tension of the perceiving soul. Thus we are brought back from the passivity of

the soul on which the impression is made, to the peculiar activity by which it apprehends the object perceived. "*Mens naturalem vim habet quam intendit ad ea quibus movetur*" (Cic. *Acad.* II, 10).

Truth has its source in the force of the immediate conviction which the *φαντασία καταληπτική* carries with it. This force belongs originally to internal and external perceptions, and also to the universal concepts, *προλήψεις, κοινὰ ἐννόμια*, which are unconsciously abstracted from them by the spontaneous activity of thought. In this way the Stoics could say that the criteria of the true are the *φαντασία καταληπτική* and the *πρόληψις* (D.L. VII, 54). On the other hand the exactness of the methodically formed concepts has to be proved by scientific demonstration. Yet, when once they are proved,—and this is an insoluble contradiction in the Stoic system,—they carry with them a certainty, not only equal but superior to the certainty of perceptions. If all reality is corporeal or individual, if every concept is only an abstraction, how could there be more truth in the thought of what is not real, than in the conception of the corporeal, which is reality itself? Yet Zeno compared a simple act of perception to the open hand, judgment to the closed hand, the concept to the fist, knowledge to the fist grasped by the other hand. The whole difference between these four forms of knowledge lies, as we see, in the greater or less force of the conviction. Certitude varies with the tension of the mind; there are in it differences of degree, but not of nature. In fact, the real criterion for the Stoics was neither the *φαντασία καταληπτική* nor the *πρόληψις*, but the force of conviction, the tension of the mind, *ἐν τόνῳ καὶ δυνάμει* (Stob. *Eclog.* II, 128)—an entirely subjective criterion. The argument which recurs perpetually in their lengthy polemics against scepticism is the practical interest, the impotence of the man who doubts, the necessity of affirmation in practical life (Plut. *De Stoic. repugn.* 47, 13: τὸ μήτε πράττειν μήτε ὁρμᾶν ἀσυγκαταθετικός).

The Epicureans, like the Stoics, make the theory of knowledge subordinate to ethics. The sensualistic dogmatism of Epicurus rests on a practical postulate, on the need of a firmly established conviction in order to avoid the uncertainties of a life left to chance. Since his ethical system rests

altogether on the sensations of pleasure and pain, sensation must be for him the criterion of truth.

"There were," Epicurus said, "three criteria, the senses, the anticipations or primary notions, and the passions: *κριτήρια τῆς ἀληθείας εἶναι τὰς αἰσθήσεις καὶ τὰς προλήψεις καὶ τὰ πάθη*" (D.L. x, 31). Through the passions we only know the pleasure and pain caused in us by things. They are the basis of practical philosophy. Anticipation, that by which we anticipate or divine sensation, is the impression (*τύπος*, D.L. x, 33) left by a frequently repeated sensation. One may say then that, for Epicurus, in the last resort, the only criterion of truth and the principle of all speculative life was sensation. If you resist all the senses you will not even have anything left to which you can refer (D.L. x, 46). The only way of escaping from absolute doubt is to admit that sensation is always veracious. Where we think to find errors of sense there are only errors of judgment. How can the testimony of sense be contradicted? Is it by reason? but rational knowledge is derived from sensible knowledge. Do our senses contradict one another? No; for each one of them has, in its own domain, an absolute validity. The different kinds of perceptions do not refer to the same thing (Sext. Emp. *Adv. Math.* VII, 203, *sq.*). Thus sensation itself is evidence (*ἐνάργεια*). Error is possible only when we go beyond sensation. Sensation is the criterion of the abstract concepts which are valid only in so far as they are confirmed by sensation, and in some cases only in so far as they are not contradicted by it (D.L. x, 33).

Epicurus does not seem to have seen the difficulties inherent in this theory. All sensations as such are true; and this being the case, we must return to the argument of Protagoras. Epicurus tries to avoid this sceptical inference by his theory of the *idola*. Our senses are affected, not by the objects themselves, but by the images, the *simulacra*, which emanate from them. Now there are many of these images, and they may, moreover, become altered during the passage from the object to the sense which they affect. If, therefore, the same object appears different to different individuals it is not because the sensation is deceptive, but because the individuals have in reality perceived different objects, since they have been affected by different images.

But this is not a solution; it merely puts the difficulty a step further back. How is the faithful image to be distinguished from the image that does not correspond to the object? We have outside us, as it were, two worlds which do not mingle though one is derived from the other—the world of

images, the world of real objects. We only know the former through perception, and, as there is no constant relation between them, the latter remains unknowable. Thus science is deprived of all objective value; and the sensualistic subjectivity in which the theory of Epicurus culminates is not far removed from the scepticism of Pyrrho.

Pyrrho's Radical Scepticism. The new Academy: Criticism of the Stoic Dogmatism. Probabilism. Carneades: Theory of Degrees of Probability.

At this period of Greek philosophy everything seemed to conduce to scepticism. Even those who attacked it fostered it at the same time by their empiricism. They questioned the possibility of knowledge, and could find no better foundation for it than a practical postulate. If this postulate were overturned, if it were maintained that our practical interests do not depend upon knowledge, that, on the contrary, these interests would be better served by abandoning a knowledge that is, in any case, unattainable, then we should have a complete scepticism; and there would be nothing left to dogmatism wherewith to oppose it. It was the leading idea of Pyrrho to make the denial of knowledge the condition of the Sovereign Good.

Pyrrho lays down three propositions: 1st, that we can know nothing of the nature of things; 2nd, that we must consequently suspend our judgment concerning them; 3rd, that the result of this suspension is ἀταραξία, which is at once virtue and happiness.

We can know nothing of the nature of things, for how could we obtain certain knowledge? Through our senses? Through them we know things, not as they are in themselves, but as they appear to us. Through reason? But reason, even where it seems to have most authority, that is, in the moral sphere, rests on mere custom and habit (D.L. ix, 61). All we can do is to suspend our judgment; ἐπέχειν τὴν συγκατάθεσιν; a thing is not more this than that, οὐδὲν μᾶλλον (D.L. ix, 74). The doubt of the Sceptics does not refer to appearances, to phenomena (φαινόμενα), which are evident (ἐναργῆ), but to the reality which we are incapable of attaining (D.L. ix, 103). "But what is evidently seen prevails wherever it may be," says Timon (Ap. D.L. ix, 105). The moment we try to get beyond it we find ourselves confronted by contradictory and equipollent reasons which prevent all affirmation

(D.L. IX, 106). In practical life apathy and indifference (*ἀδιαφορία*, *ἀπαθεία*) correspond to doubt (*ἐποχή*, *ἀφασία*) in theoretical life (Aristocles ap. Euseb. *Præp. Evang.* XIV, 13, 2). Cicero speaks of Pyrrho as of one who was before all things a moralist (*De Fin.* VII, 16, 43). To him (Pyrrho) scepticism was not an end but a means. He cared nothing for dialectics or subtle discussions: it was solely with the moral life that he was occupied. "As Pyrrho had left a great example, as he was venerated almost as much as Socrates, the Sceptics thought it well, when their doctrine had been completely elaborated, to invoke his name, and to place themselves as it were under his patronage. It was a good answer to those who so often accused him of abolishing virtue and making life impossible. In short, Pyrrho was a kind of saint under whose patronage Scepticism placed itself; but the father of Pyrrhonism appears to have been very little of a Pyrrhonian" (Brochard, *Revue philosophique*, May, 1885).

- Scepticism was taught by Pyrrho as an introduction to Ethics, the Academy taught it for its own sake, and commenced against the Stoic dogmatism a polemic in which, with an interval of nearly a century between them, Arcesilaus took part against Zeno, and Carneades against Chrysippus.

Arcesilaus proposes his theory as a refutation of the Stoic dogmatism. He appears to regard the doctrine of *φαντασία καταληπτική* as the only possible theory of knowledge, and by proving it to be false he believes that he has proved the impossibility of knowledge. The Stoic criterion was the force of conviction which the *φαντασία καταληπτική* carries with it. Arcesilaus replies that this conviction may belong to a false as well as to a true perception, *nullum tale esse visum a vero ut non ejusmodi etiam a falso possit* (Cic. *Acad.* II, 24, 77). Since all our cognitions have their origin in the *φαντασία καταληπτική*, when the latter disappears science disappears also, and the philosopher cannot give his assent to nothing. To the Stoics' objection that scepticism makes life impossible, Arcesilaus replies that probability is the only rule of practical life. He taught the doctrine of Probabilism.

A century after Arcesilaus the scepticism of the Academy had in Carneades its most famous representative. There is abundant testimony as to the acuteness and eloquence of this philosopher, and the admiration he inspired not only in his disciples but in his antagonists (Cic. *De Orat.* II, 38, 161; D.L. IV, 62, 63). This great thinker not only gave a firmer basis to the negative side of scepticism, he also defined the resources which

this theory allows to the human mind. He gave precision to the doctrine of probability, and indicated its conditions and different degrees. He was the great teacher of ancient scepticism.

Carneades does not confine himself to refuting the Stoic doctrines, he also attacks those of all the previous philosophers (Sext. Emp. *Adv. Math.* VII, 159). He denies both the formal possibility and the results of science.

Knowledge is impossible, for there is, in truth, no kind of conviction which has not at some time or another proved false, or which consequently may be regarded as the guarantee of the possession of truth (Sext. Emp. *Adv. Math.* VII, 159). An examination of our mental representations leads to the same conclusion. These representations are merely subjective modifications, and before they could provide the elements of knowledge it would be necessary that in manifesting themselves to us they should at the same time reveal the external objects which are their cause (*Ibid.* 160 sq.). And how many are the errors of the senses which might be mentioned! There might still remain the possibility of establishing a criterion in order to distinguish the true perceptions from the false; but how could this be done seeing that all have the same origin and bear the same mark? Think of the images we see in dreams, of the madman's hallucinations (*Ibid.*; Cic. *Acad.* II, 15, 47). Many false perceptions are so like the true as to be indistinguishable from them. There are objects which are so similar that we confound them (for instance, two eggs): this is the denial of the Stoic principle of indiscernibles (*Ibid.* 164; Cic. *Acad.* II, 13, 40). Moreover, the transition from the true to the false usually takes place by insensible degrees, and consequently the distinction between them escapes us. Carneades applies this observation not only to sensations, but to the concepts of our understanding. His triumph was most complete when he applied it to the quantitative notions, reviving the Sorites, and all the Megaric logical subtleties (*Ibid.* 416 sq.; Cic. *Acad.* II, 29, 92 sq.). To sum up, knowledge is impossible because we have no criterion, because error carries with it the same conviction as truth.

As regards the results of knowledge, the criticisms of Carneades were principally directed against the views of the Stoics. He refuted, by means of arguments which are still current, the Stoic teleology (Cic. *De Nat. Deor.* III, 26, 65-70), the idea of a divine personality (Cic. *Ibid.* III, 13, 32 sq.; Sext. Emp. *Adv. Math.* IX, 139 sq.), and intelligence (Sext. Emp. *Adv. Math.* IX, 152, 175), the proof of the existence of God by general consent (Cic. *De Nat. Deor.* III, 4, 11), the theory

of determinism (Cic. *De Fato*, 11, 23 sq.), and lastly, without much difficulty, divination, and the other ancient superstitions (Cic. *De Divinitat.* I, II).*

From this twofold criticism of dogmatism Carneades concludes that it is impossible to know anything. The wise man affirms nothing, not even that he knows nothing (Cic. *Acad.* II, 9, 28).

All our representations have by no means the same value. We are obliged to act, and must therefore attribute to certain representations an authority sufficient to allow of our being determined by them. We must attribute to them, not indeed truth, which is beyond our grasp, but at least the appearance of truth. τὸ ἀληθὴ φαίνεσθαι ἐμφασία (appearance), πιθανότης (probability). Truth implies agreement with the object and does not depend on ourselves. We can only judge of that which appears to us to be true (Sext. *Emp. Adv. Math.* XII, 166 sq.). In this adherence or belief there are degrees which correspond to the degrees of probability. A representation which appears to be true when taken by itself, but is not in agreement with the rest of our representations, has only the lowest degree of probability (*Ibid.* 173). To the degree immediately above this belongs a representation whose probability is confirmed by its agreement with concomitant representations (*Ibid.* 176); the highest degree of probability is reached when these concomitant representations are themselves corroborated in the same manner (*Ibid.* 182); and since the series of possible experiences is indefinite, we may in this way get nearer and nearer to certainty without ever attaining it. A representation belonging to the first degree is merely probable, but when it belongs to the second it has the additional advantage of not being contradicted. In the third degree the representation is not only not contradicted, it has also been tested, is at once πιθανὴ καὶ ἀπερίπτωτος καὶ περιωδευμένη (*Ibid.* 184). Thus the further we carry our inquiries the more probable is our knowledge, and the nearer we get to certainty. Carneades also applies this theory to ethical life. He does not pronounce on the question of the sovereign good, but merely determines the relative value of different kinds of good. In ethics the theory of προηγμένα or desirable things, corresponds to the theory of probability.

It is impossible to deny the philosophical value of this theory. If we are denied absolute certainty, at least all effort of the mind is not stultified, it still has some meaning, some significance; the mind may adhere freely to a probability which is brought nearer and nearer to certainty by the mutual agreement of representations and ideas within the unity of a coherent thought.

Eclecticism: Evidence the Criterion of Truth. Antiochus. Cicero.

The theory of probability prepared the way for a return to dogmatism. The Sceptics had rejected all the philosophic systems as false, the Eclectics admitted that not one of them was true; but, advancing a step farther in the direction marked out by Carneades, they thought that from all the systems taken together, they might be able to find the truth, provided these systems were critically examined. What was to be the criterion of truth? If we are to depend on the propositions in which philosophers agree, we should only arrive at very vague and general notions. Shall we fall back on the practical value of doctrines? But what is the destiny of man? Even this is one of the problems concerning which philosophers are most divided; so that the only measure of truth left is individual consciousness. But here again the Eclectics only develop the theory of Carneades, who, for truth in itself, substituted *that which appears to be true*. They accept with the Sceptics the subjective character of evidence, but they affirm that man possesses as it were a measure of the true and the false, that he may fully trust to what is immediately given in his consciousness, to what appears to him as certain, apart from scientific inquiry. Eclecticism is the common-sense school of antiquity. As Zeller remarks, the Eclectics were to the Sceptics who went before them what in modern times the Scottish school has been to Hume.

It was very natural that the first appearance of eclecticism should have been in the Academy. The theory of Philo of Larissa, the pupil and successor of Clitomachus, who was himself a disciple of Carneades, is somewhat vague. He professes to remain faithful to the spirit of his masters, maintaining that there is no sure sign of the true and the false (*Acad.* II, 6, 18), nevertheless he does not deny the possibility of certainty. We must, he says, distinguish *inter incertum et id quod percipi non possit* (*Cic. Acad.* II, 10, 32). There is a certainty which is founded on evidence, and there are truths impressed on our minds which are evident and which yet cannot be perceived and comprehended as the Stoics supposed; *esse aliquid perspicui* (ἐναργές) *verum illud quidem impressum in animo atque mente, neque tamen id percipi ac comprehendere posse* (*Acad.* II, 11, 34).

In order to attain certitude it was necessary to break altogether from the theory of Carneades, and this was done

by Antiochus of Ascalon. His eclectic dogmatism was founded on the postulate which served as basis to the Stoic dogmatism, namely, on the necessity of fixed opinions in order to act. Probability alone is not enough for practical life, and even supposing it were enough, the principles of Carneades would destroy it. Probability and certainty disappear together. If the true as such cannot be known, how can anything have the appearance to us of being true? (Cic. *Acad.* II, 11, 33).

Antiochus, indeed, reasserts the possibility of certainty. He examines and refutes Carneades' criticisms. As regards the senses his arguments resolve themselves into the following: because our senses sometimes deceive us, we have no right to infer that they deceive us always (Cic. *Acad.* II, 7, 19). As against general concepts, Carneades used to bring forward the illusions of dreams or of madness. But these do not bear the evidence peculiar to true concepts (*Ibid.* II, 15, 47). Carneades tried to reduce these concepts to nothing by such arguments as the Sorites, but if two things resemble one another it does not follow that they are indistinguishable. The only conclusion is that truth is difficult to discover. Finally, scepticism is self-contradictory. The Sceptic proceeds by definitions and reasonings, yet he denies that there is any difference between error and truth; he affirms that there are representations which are false, and yet believes that there is no difference between the representations that are true and those that are false (*Ibid.* II, 9 29-41, 43).

Having thus refuted Scepticism, Antiochus founds an eclectic dogmatism. He professes to return to the true tradition of the Academy, which, according to him, had been broken since the time of Arcesilaus. Plato, Aristotle, and Zeno differ, he says, more in language than in ideas (Cic. *Acad.* II, 5, 15), and here we have another argument against Scepticism. Since it is possible to reconcile the various systems, the Sceptic can no longer bring forward the contradictions between them as an argument in his favour. Arius Didymus and Potamo, contemporaries of Augustus, were likewise eclectics.

Cicero had been taught by Philo of Larissa and Antiochus, and he adopted to a great extent the theories of the new Academy. But if the contradictions of the great philosophers appeared to him a sufficient reason for doubting the possibility of speculative truth, he is in reality an eclectic, and when he speaks of moral truths he forgets Carneades and is as dogmatic as a Stoic. Every conviction rests ultimately, he says, on an inner and immediate certainty, on our own natural feeling of truth, on a

kind of innate knowledge which precedes experience. *Sunt enim ingenitiis nostris semina innata virtutum* (*Tusc.* III, 1, 2). *Natura homini dedit talem mentem, quae omnem virtutem accipere posset, ingenuitque sine doctrina notitias parvas rerum maximarum* (*De Fin.* V, 21, 59). *Animum esse ingeneratum a Deo* (*De Leg.* I, 8, 24).

Revival of Scepticism. Enesidemus; Agrippa: the Tropes. Sextus Empiricus. Summary of Ancient Scepticism. Criticism (1) of the Formal Possibility, (2) of the Results of Knowledge.

Eclecticism was the offspring of Scepticism, and partook of its nature. To refuse to decide between rival systems of philosophy was equivalent to that abstention from judgment which was recommended by the Sceptics. The observation was soon made that the meaning of a philosophical proposition is determined by the system it belongs to; and that consequently propositions borrowed from different systems are as mutually exclusive as these systems themselves. Thus Scepticism continued side by side with Eclecticism, but from this time forth it showed no originality. All it could do now was to unite, order, and develop the arguments of Arcesilaus and Carneades. This was done by the so-called new Sceptics.

Ptolemy of Cyrene, Enesidemus, Agrippa, and Sextus Empiricus (in the two first centuries of the Christian era) professed, however, not to belong to the New Academy, while they borrowed from it most of their arguments. They accuse this school of inconsistency, of having by its theory of probability brought about the eclectic dogmatism to which its later representatives had been converted. Scepticism in its original purity, that is to say the scepticism of Pyrrho, seemed to them to be more secure against the attacks of dogmatism; but, in truth, it is difficult to say in what they differed from the Pyrrhoniens of the New Academy. The chief merit of Enesidemus is that he collected all the different reasons for doubting under ten heads or *tropes* (*D.L.* ix, 87; *Sext. Empiricus, Adv. Math.* VII, 345).

Four of them refer more especially to the subject, their aim being to throw doubt upon the veracity of our perceptions by showing that these contradict one another (*Sext. Emp. Pyrrh. Hypotyp.* I, 36-117). In the first place, the same objects appear different to different animals; secondly, even among men there are physical and moral differences, owing to which the same object is not perceived by all in the same way;

thirdly, even in the same man the different senses are not always in agreement, and sometimes they contradict one another; fourthly, our perception of things is affected by our physical and moral inclinations, by the state of our health, by the fact of our being awake or asleep, at rest or in motion, sad or joyful, etc. How are we to know whether we are in a condition to perceive things exactly as they are? Whatever our criterion may be, it requires proof; and in order to know whether this proof is correct, another criterion is needed, and so on *ad infinitum*.

Enesidemus' six other tropes may be said to refer to the object. They show the uncertainty and difficulty which surround our knowledge in its relation to the object. Firstly, the same thing appears differently to us according to the different forms it assumes; the same substance will appear white as a powder, and yellow or black as a solid mass. A grain of sand appears to us to be hard, whereas a heap of sand is soft. Secondly, the result of observations vary with circumstances. A square tower appears to us from a distance to be round. Thirdly, things make more or less impression on us according as we are more or less accustomed to them. Fourthly, we cannot know things in themselves on account of the relativity of all our representations. Fifthly, we perceive things through a medium (air, liquids, etc.), the influence of which on our perceptions we are unable to appreciate. Sixthly, the differences in laws and in customs render impossible any decision as to what is true and what is false, as to what is good and in conformity to nature (Sext. Emp. *Pyrrh. Hypotyp.* I, 117-163).

Most of these arguments bear on our sensible knowledge only, but Enesidemus adds to this criticism another which concerns our conception of the true, and especially of causality (Emile Saissset.: *Enésidème*). He also examines our conceptions of passivity, of birth and destruction, as being connected with our notion of causality, and he tries to show that every one of these notions involves a contradiction. As against the Stoics, he also maintains the impossibility of inferring from phenomena to substance, from external signs to what is hidden. As we shall see, his arguments were developed later by Sextus Empiricus. The conclusion arrived at by Enesidemus is that no one should affirm anything, not even his own doubt. He wished his philosophy to be called not a doctrine (*ἀδoκoν*), but a tendency (*ἀγωγη*).

Agrippa reduces the sceptical arguments or tropes to five:

Firstly, contradictions among human opinions; secondly, infinite regress, the necessity of proving everything; thirdly, relativity of all our representations, which vary with the subject; fourthly, every demonstration amounts to a *petitio principii*; fifthly, *diallelos*: whatever is used to prove a proposition stands itself in need of this same proposition in order to be proved; for example, the veracity of thought can be proved only through sensible perception, and *vice versa* (Sext. Emp. *Pyrrh. Hypotyp.* I, 164 sq.).

Finally, at the end of the second century of the Christian era, we find in Sextus Empiricus a recapitulation of all the arguments of his forerunners.

He continually returns to the argument of the impossibility of establishing a criterion of truth, or of proving anything, because every demonstration demands another, and so on to infinity. Not even the proposition that man is able to judge of truth can be maintained. For with whom would this decision rest? With one man or with all men? In the former case, where is this man to be found? In the latter, how is an agreement between all men to be established? And even if we were to grant that man has the power to judge of the truth, which of his faculties will enable him to do so? The senses? but these continually contradict each other in different men, and in the same man from one moment to another; moreover, the senses only give us subjective modifications and never enable us to assert anything, as to the nature of things. Can it be through the understanding? But how could man's understanding, which is internal, reach the external? This last argument contains, as it were, a presentiment of one of the problems in Kant's Critique: What proof have we of the objectivity of the categories of human thought? (*Pyrrh. Hypotyp.* II, 18-84; *Adv. Math.* 314-445). Sextus Empiricus also examines our notions of the true, but on this point his arguments do not contain much beyond what he had already said concerning the criterion of truth.

Having examined the formal possibility of knowledge, Sextus Empiricus proceeds to attack the results arrived at by the divers dogmatic systems of philosophy; he develops the arguments of his forerunners, and more especially those of Enesidemus.

The Stoics had distinguished two kinds of signs. The first only recall other phenomena with which by a previous experience we know them to be associated; in this sense lightning is the sign of thunder, smoke of fire; and these they call signs of things already experienced (*σημεία ἐνδεικτικά*). The other kind of sign reveals to us that which we do not know through any experience; these are indicative signs (*ἐκκαλιπτικά*). Phenomena, for example, are not only signs that recall to memory other phenomena, for they also reveal to us substances and causes. Sextus Empiricus denies the existence of these indicative signs. The sign and what is signified are, he says, two things which are relative to one another. Now, of two correlative things one cannot be known without the other (e.g. right and left); therefore we cannot understand a sign as a sign without understanding the thing it signifies, and consequently we should know together with it that which it is supposed to reveal to us; and hence the sign would be useless. The sign cannot precede in the order

of knowledge that which it signifies, therefore there are no revealing signs. How then can we infer substance from phenomena? The latter can make nothing known to us that we do not already know at the same time, and in the same way as themselves (*Pyrrh. Hypotyp.* II, 80-133; *Adv. Math.* VIII, 141-298).

Not only, according to Sextus Empiricus (*Adv. Math.* IX, 207), are we unable to arrive at causes through phenomena, but the very idea of cause involves a contradiction.

For no matter how we try to imagine it, we are unable to conceive the relation of cause and effect. The cause must precede the effect, but a cause is a relative thing, for it can have no existence unless in relation to some effect. Now, correlative things are simultaneous not only in thought but in existence. And if the cause and the effect are simultaneous, how are we to distinguish them? Which is the effect, which the cause? And how are we to conceive cause and effect—as corporeal or incorporeal? But the corporeal cannot produce the incorporeal; and conversely. We are unable to conceive any relation between these two heterogeneous terms. Again, the corporeal cannot be produced by the corporeal, nor the incorporeal by the incorporeal, for, were it so, that which is derived from the active substances would be already contained in them and consequently would not have had to become. Finally, either the cause produces its effect alone, or it requires a matter in which to produce it. In the former case, from being one, the cause becomes two, and, since it is its nature to produce, from being two it will become four, and so on to infinity. But is it not absurd to make infinity come out of unity? And if the active principle can do nothing without the co-operation of the passive principle, the cause being defined as being such that the effect takes place when it is present and does not take place when it is absent, the passive principle is as much the cause as the active (*Adv. Math.* IX, 195-276).

It will be noticed that this lengthy criticism of the conception of causality is an entirely objective one, and that it in no wise foreshadows the modern psychological method. Sextus Empiricus endeavours, by means of arguments of the same kind, to reduce to nothing the conceptions of diminution and increase, and, with them, those of the transposition of parts, of change and of motion. He analyses the notions presupposed in physical science: space, body, rest, motion, mixture; and the proof of the existence of God, and of the providential attributes belonging to God which are part of the doctrine of universal design. His arguments, which are scarcely more than a development of those of his predecessors, end, like theirs, in the

conclusion that all affirmations are indifferent: *ἰσοσθένεια τῶν λόγων*. Every affirmation may be contradicted by an affirmation of equal value. We must therefore suspend our judgment and act in accordance with appearances, custom, or the need of the moment.

Neo-Platonic Mysticism : Ecstasy.

It seemed as if scepticism was to be the last word of Greek Philosophy. The Eclectics had attempted to avert the ruin of philosophy by appealing to our immediate knowledge, to common sense. But there was no more harmony between the conceptions of the different members of the eclectic school than between the systems which they professed to reconcile; and this diversity was another triumph for scepticism. Truth was not to be found either in the relation of thought to its object nor in the reflection of thought upon itself. We must abandon the hope of attaining truth unless we admit that it is directly communicated to us by Him who is its eternal source, that is, by God Himself. And this was the extreme solution adopted by the Neo-Platonists, a solution which scepticism had rendered necessary. Only the despair of attaining certainty in scientific thought could have led to this attempt to find truth in a revelation that was above thought itself.

But how was certainty to be founded on the knowledge of a God Whose existence it was necessary to prove? A reply to this question is found in the system of Plotinus. God is within us, we are not really distinct from Him. The whole function of philosophy is, by forcing us to return to our true being, to make us conscious of our identity with the Divine Being; to render possible the ecstasy by which we are absorbed in the supreme unity. Thus the Neo-Platonists, like the Eclectics, make an appeal to immediate certainty. But how could certain knowledge of the object be derived from the mere reflection of the subject on itself? To this question the Eclectics had found no answer; but it is solved when the reflection of the subject on itself is ultimately nothing else than the union of the subject with the Supreme Principle from which are derived both all existence and all truth.

Aristotle saw clearly that proof is possible only on principles which themselves do not require proof. If we can find truth

through dialectic it must be that we possess it already. How is this possession of the truth to be explained? The soul in her higher part dwells always in the intelligence; she has, in the intuition of herself, the intuition of the intelligible, of the world of ideas (Plotinus, *Enn.* IV, 4, 2). But above this intellectual intuition, in which there is still consciousness and distinction, there is the intuition of the One, there is *ecstasy*, by which we are lifted above all determinate thought and fused with God (*Ibid.* VI, 9, 4). It is only through ecstasy that we possess the principle and the unity of ideas. So long as we have not risen to this higher intuition in which we become one with the Absolute, there remains a duality of subject and object, of thought and being, which stands in the way of knowledge. Thus it is in ecstasy that the ultimate principle of all certainty is found. But Plotinus himself admits that ecstasy does not depend on ourselves; we must wait for it, we can at most prepare ourselves for it by purification through knowledge and virtue. Certainty would seem then to be only the privilege of some elect souls, a gift from heaven.

Christianity introduces into the Theory of Certainty a new element: Faith.

In the Neo-Platonic ecstasy we are immediately united to the Absolute, the intuition of which is above intelligence. But this ecstasy is an accidental and passing state. Quite other is the function of Faith (*πίστις*). In Christian philosophy Faith, according to St. Paul, is not only the act of a mind that assents to the Evangelical teaching, but a feeling of trust and the need of loving God. It is, moreover, an act of will by which we renounce the flesh, in order to live the divine life through communion with Christ.

I live; yet not I, but Christ liveth in me: *ὁ δὲ οὐκ ἐν ἐγὼ, ὁ δὲ ἐν ἐμοὶ Χριστός* (*Gal.* II, 20). Thus faith takes possession of the whole soul, renews, regenerates her, gives her new life. But man is not the author of his own salvation. Faith comes to him from God, Who, by communicating His spirit to man, brings about the birth of the spiritual man (*πνευματικός*) in him.

While he shows the part played by faith in all our knowledge, St. Augustine endeavours to bring about the union of rational with religious faith.

Scepticism cannot be reconciled with that need of certainty which allows the human mind no rest without the possession of truth. In the second place, scepticism involves contradictory elements: even if I doubt I have the notion of knowledge, for doubt implies a comparison between actual knowledge and the notion of an ideal knowledge to which the former does not correspond (*De Vera Relig.* 73). Finally, doubt implies the fact that he who doubts thinks and exists (*De Trin.* X, 14). Here we have Descartes' *Cogito ergo sum*. It is impossible to rest satisfied with scepticism. Now faith (in the most general sense of the word), and knowledge presuppose one another, for they are joined in every act of knowledge. What is knowing? It is apprehending by reason that which makes a thing necessary; but before we can become conscious of this necessity we must admit the existence of the object, we must rely on the immediate evidence which discursive thought will afterwards confirm (*De Liber Arbit.* II, 2). Thus faith, or the act of will which gives its assent to thought (*cum assensione cogitare*), is the first step towards knowledge. That our sensible perceptions are subjectively true there can be no doubt; but that there is a real world corresponding to these perceptions is a truth of which faith alone can give us certainty; and that this sensible world contains, so to speak, supra-sensible truth is another act of faith which precedes thought. It is therefore possible to have faith without knowledge, but there can be no knowledge without faith. St Augustine's ideal is neither belief without knowledge nor knowledge without belief, but the faith which is made complete by knowledge, or the knowledge which confirms this faith (*De Utilitate Credendi*, II, 25). There is a double analogy between religious faith and the faith that provides the object of our knowledge. Religious faith implies an act of will and of love; to know the good we must love and will it. Moreover, religious faith also finds outside itself its object, which consists in the supernatural truths given to us in revelation.

The Middle Ages: Gradual Separation of Faith from Reason results in Scepticism. Montaigne. Charron.

The Mediaeval philosophers, like St. Augustine, regarded faith as an experience: the experience of an ethical and spiritual life as opposed to external experience. For the ancients, moral life depended on knowledge, "man acts as he thinks." For the great Scholastics; on the contrary, the experience of the life of the soul, that profound consciousness of a spiritual nature which is faith, is both the perfection and the condition of scientific knowledge. Faith is not opposed to knowledge; it prepares the way for knowledge. Truth cannot contradict itself.

St. Anselm expounds with much force the doctrine: *Non quaero intelligere ut credam, sed credo ut intelligam*. I believe in order to understand, *quia nisi credidero, non intelligam*, for if I did not believe I should not understand (*Prolog.* 1). St. Thomas does not go quite so far; he thinks that revealed truths such as those of the Trinity, original sin, etc., cannot be proved by reason, not because they are against reason, but because they are above it, and that is why they are objects of faith (*Summa Theol.* I, *Quaest.* 32, *Art.* 1). Faith in man pre-supposes the co-operation of grace, or, as it were, a call from God (*interior instinctus Dei invitantis*). It depends more on the will than on the intellect. The mind adheres to truths of a supernatural order, not by the force of an irresistible demonstration, but by obeying the will. Reason can only refute the arguments of the enemies of the Church by showing that they are false or not necessary (*falsas, non necessarias*). Faith, like grace, does not destroy nature but completes and perfects it. Reason pre-supposes the preambles of faith (*praeambula fidei*), and in this sense is subordinate to faith, *naturalis ratio subservit fidei* (*Summa Theol.* II, *qu.* 2).

Finally, when, with William of Ockham, Nominalism prevailed, faith was separated from and even opposed to knowledge. Realism, by representing the very ideas of God as the objects of knowledge, was able to find harmony between reason and faith. Nominalism reduced science to a pure formalism. It was no longer Divine ideas that were the basis of our reasonings, but words, *nomina, flatus vocis*. Revealed truths were therefore imposed by faith, and faith had nothing in common with reason, which had only a relative value. Thus it would seem that the philosophy of the Middle Ages had failed in its task: it did not succeed in reconciling faith with reason. But this was because faith was then identified with the dogmas of a positive religion. Nevertheless a great truth was brought to light, namely, that true philosophy, if not science in the strict sense of the word, cannot be separated from the experience of our ethical and spiritual life; that philosophy is made up of ideas revealed by this experience and reflection.

It became a habit amongst the bold philosophers of the Renaissance to draw a distinction between theological and philosophical truths, and to assert that they might co-exist although opposed to one another. Doctrines submissively accepted as articles of faith were rejected in the name of reason. But this separation of reason and faith divided the human mind against itself. It was inevitable that thought should openly return to the ancient tradition, and

that reason should once more be reinstated. This was done by Descartes. If men are to rest content with the mediæval conception, with the antithesis between reason and faith, the consequence will be a scientific scepticism.

This is the view taken by Montaigne, whose whole work is a negation of what had been affirmed by the great Scholastics. His essays, indeed, mark the end of mediæval thought, although he merely resumes the arguments of ancient scepticism concerning the formal possibility of, and the results obtained by knowledge. Montaigne's friend and disciple Charron thinks that a very good method of introducing and establishing Christianity among an unbelieving and infidel people would be to make them disciples of Pyrrho. Reason, being then convinced of its own impotence, would easily submit to revelation, for, he says, never would a Pyrrhonian or an Academician be a heretic: they are two opposite things.

Descartes: Clear and Distinct Ideas; Divine Truthfulness; Reconciliation.

Was there then no choice between scepticism and revelation? Some sought to escape from this alternative,—Galileo and Copernicus through the natural bent of their scientific genius; Telesio and Bacon because they had a presentiment of modern scientific methods; Giordano Bruno and Nicholas of Cusa through their philosophic enthusiasm. It was the spirit of antiquity come to life again, though not yet fully conscious of itself. Descartes was the first to attempt, with a full consciousness of what he wanted and of what had to be done, to re-establish an independent philosophy, and that not only *de facto* but *de jure*.

The introduction to his philosophy is, as it were, a summary of the whole history of human thought since the Middle Ages. He puts aside faith and at once finds himself confronted by scepticism: how was he to escape from it? By employing it as a method. We have accepted most of our opinions without reflection from our teachers and our desires, and we must set them aside (*Disc. de la Méth.*, 2nd Part). Since our senses sometimes deceive us, we cannot trust them at all. Some men make mistakes in their reasoning concerning even the simplest things in geometry, hence we shall reject as false all

those reasons which we now take to be demonstrative. Lastly, as a malicious spirit, as cunning and deceitful as it is powerful, may be making sport of us and using his skill to deceive us, we shall suspend our judgment on all things (*1st Medit.*).

In its methodical doubt Cartesian philosophy starts from scepticism. But out of this very doubt does not an irresistible truth emerge? I who doubt, think. *I think, therefore I am.* And this is the starting point of modern thought; it establishes the thinking subject, and so clearly, that henceforward the facts of consciousness at least, and the manifestations of thought, are beyond the reach of the most audacious scepticism. All that the latter can now question is the correspondence between these subjective phenomena and reality, that is to say, the existence of objective certainty.

How is this objective certainty to be attained? This is the most critical point in the Cartesian theory. When I say that "I think, therefore I am," what is it that assures me of the truth of this proposition? It is that I know clearly that in order to think I must exist. I may therefore take it as a truth that those things which I conceive very clearly and distinctly are all true. The clearness and distinctness of ideas is therefore the criterion of their truth. Starting from this principle, Descartes proves the existence of God. But having done so, he seems to invert the order of his first principles, for he adds that it is because God exists that what we can see clearly and distinctly is true.

"The principle which I have already taken as a rule, viz., that all the things which we clearly and distinctively conceive are true, is certain only because He is or exists, and because He is a perfect being, and because all we possess is derived from Him. Whence it follows that our ideas or notions, which to the extent of their clearness or distinctness are real and proceed from God, must to that extent be true" (*Disc. de la Méth.* 4th Pt.).

But is there not here a vicious circle? Reason proves the existence of God, and God guarantees the validity of reason. Our demonstration of the existence of God is valid only if He is already shown to exist. God is proved by the natural light of reason, and without God this natural light could only be a source of error. In order to understand how Descartes escapes from this seemingly vicious circle we must observe his view of certainty. The problem is not to pass from what

appears to us as true to what is true in itself, but to attain absolute certainty in the realm of thought. The doubt we want to get rid of is the doubt of a man who has just done a sum of addition and asks himself whether he has made a mistake in it.

"When in thinking we have a clear conception of a certain truth, we are naturally inclined to believe this truth. And if our belief is so firm that we can never have any reason to doubt that which we believe in this way, we require nothing more; for we have with regard to this matter as much certainty as one can reasonably desire. For what matters it to us if some one were to suppose that that of which we are so strongly persuaded is false in the eyes of God or of the angels, and is therefore, absolutely speaking, false?" (*Answer to the 2nd Objection*).

We must distinguish between an immediate intuition and the act of memory implied in every deduction that is at all lengthy. When we fix our mind on an evident truth, such as the *cogito ergo sum*, there is no room for doubt. Our intuition, that is to say, our clear and distinct knowledge of the truth before us does not require the guarantee of the divine veracity. But when we make a lengthy deduction, or when we remember certain conclusions without thinking of the principles by which they are established, and without going once more through the reasoning by which they are justified, only the knowledge of God, who is the warrant of the validity of our thought, can give us certainty: The knowledge of the atheist is not true science, because any knowledge on which doubt may be thrown cannot be called by the name of science (*Ibid.*).

We have now escaped from the circle in which we seemed to be imprisoned. The *cogito ergo sum* is a clear and distinct truth at the moment when we think it, and as there is no thought that does not imply the *cogito*, the latter never falls into the realm of memory. From the *cogito* we are led to the existence of God without going beyond the limits of the irresistible evidence which leaves no room for doubt. When we have reached the idea of God, we have the certainty that our mind is made for truth; and this certainty extends to the premisses which have served to prove the existence of God.

"In the first instance, we are sure that God exists, because we give our attention to the reasons which prove His existence; but after that, it is enough for us to remember having conceived a thing clearly in order to be

sure that this thing is true, which would not be the case if we did not know that God exists and that He cannot deceive us" (*Answer to the 4th Objection*, 2nd Part).

To sum up: God is the principle of knowledge as well as of existence. In Him is the theoretical basis of certainty; but its practical criterion is in the clearness and distinctness of ideas. By an intuition which leaves no room for doubt we know the existence of thought and the existence of God, which is immediately deducible from the existence of thought.

As for the existence of the world it is guaranteed to us by the divine veracity alone. In the same way the knowledge of this world is subordinate to the existence of God, for it is because God exists and because He is perfect that distinct realities correspond to our clear and distinct ideas.

Malebranche: Certitude and Vision in God.

According to Descartes, the truthfulness of God assures us that real things correspond to our clear and distinct ideas. We have thus three terms before us: the ideas of the mind, reality, and God. Malebranche simplifies Descartes' system by reducing these three terms to one. The ideas are reality itself, and our mind, which apprehends them by an immediate intuition, does not require to be guaranteed by God, since in so far as it has clear and distinct ideas it sees God Himself.

"If our bodies move in a corporeal world, our minds are constantly being carried into an ideal world which affects them, and thus becomes perceptible to them" (*Entretiens* I, 5). To deny the reality of the ideas would be to assert that the non-existent can be thought. "All the things of which I think, are, or at least exist as long as I am thinking of them. When I think of a circle or a number, of Being, or the Infinite, or of a certain finite being, I perceive realities, for if the circle of which I am thinking was nothing, when thinking of it I would be thinking of nothing; now the circle of which I am thinking has properties that do not belong to any other figure, therefore this circle exists at the time I am thinking it, because the non-existent has no properties, and one non-existent thing cannot be different from another non-existent thing" (*Ibid.* I, 4). All these ideas exist in God, Who is the basis of their reality. "All our clear ideas are in God as far as their intelligible reality is concerned. It is only in Him that we see them, only in the universal reason which through them enlightens all minds. If our ideas are eternal, immutable, necessary, it must be that they exist in an immutable

Being; our minds dwell in the Universal Reason in that *Intelligible Substance* which contains the ideas of all the truths discovered by us" (*Ibid.* I, 10).

Thus the principle of certainty is our union, or rather our *oneness* with God. Truth is God present in us, thinking in us; the intelligible is the real and the absolute. For Malebranche, as for Descartes, the practical criterion of truth is the clearness of our ideas. "In order to know the works of God we must consult the ideas He gives us; those which are clear; those on which He has formed these works. We run a great risk, if we follow any other method" (*Ibid.* III, 12). "All our clear ideas are in God in so far as they have intelligible reality. It is only in Him that we see them" (*Ibid.* I, 18). What, then, is the use of the material world on this theory? It has none. If it did not exist, nothing would be changed in our knowledge of the intelligible world (*Ibid.* I, 5). We could even, absolutely speaking, have the same feelings independently of objects (*Ibid.* I, 8; VI, 4). And on the other hand, if the sensible world did exist we should have no means of perceiving it; why then affirm its existence? It cannot be known immediately, and the feelings which lead us to believe in it are purely subjective modifications.

"Bodies cannot act on our mind nor be present to it, and our mind can only know them in the ideas which represent them, and can only perceive them through the modes and feelings of which they cannot be more than the occasional cause" (*Entr.* VI, 5). The external world cannot be proved, "The volitions of God which refer to the world are not contained in the notion we have of Him, and since only these volitions can give being to creatures, it is clear that only those truths can be demonstrated which have a necessary connection with their principles. Thus, since we cannot make sure of the existence of bodies through demonstration, there is no other way of doing so except through the authority of revelation" (*Ibid.* 6).

These divers sensations by which we are affected are the results of the general laws of the union of the soul and the body, and are nothing else than natural revelations by which God informs us that we have a body and that we are surrounded by other bodies. But our senses sometimes deceive us; hence speculative doubt is still possible, and we must fall back on *supernatural revelation*.

"Faith provides us with a proof which it is impossible to resist. Whether there are bodies or not, it is certain that we see them, and that God alone can have given us sensations of them. It is therefore God who puts before my mind the appearance of the men with whom I live, of the books I study, of the preachers I hear. . . . Now, faith tells me that God has created the heavens and the earth, that the Scriptures are a Divine Book. This Book, as it appears to me, tells me positively that there are thousands and thousands of creatures and things. Behold, now, all my appearances changed into reality. Faith being pre-supposed, the existence of bodies is strictly demonstrated" (*Ibid.* 8).

*To sum up: our soul stands in two relations; one of these is immediate and necessary, a relation to the Author of its being, to the Universal Reason, which is the place of spirits as space is the place of bodies; the other relation is mediate and contingent, though governed by general laws, a relation to the body and through it to other bodies. The soul can therefore be only indirectly assured of the existence of bodies, including its own. It is only to God that the soul is immediately united. Thus, vision in God, which is the effect of the constant action of God upon us, or, in other words, of the connection between our reason and the Universal Reason, is the foundation of all certainty.

Spinoza: In so far as it possesses Adequate Ideas the Human Mind is one with the Divine Mind.

. To say: "by substance I mean that which is in itself and is conceived through itself. . . . by mode I mean that which exists and is perceived through something other than itself," is to assume that things have existence by reason of and in proportion to our conception of them; is in fact to identify Being with thought. Thus in Spinoza we find once more the principle of clear ideas. His *Ethics*, even in its external form, is the most striking application of this theory.

"A true idea (for we possess a true idea) is something different from its object (*ideatum*). Thus a circle is different from the idea of a circle (*On the Improvement of the Understanding*, trans. by Elwes, p. 12). A true idea must correspond with its *ideate* or object (*Eth.* Part I, ax. VI). How are we to know that an idea corresponds with its object? For such a distinction to be possible, the true idea must be recognized by intrinsic marks. That which constitutes the reality of a true thought must be

sought in the thought itself, and deduced from the nature of the understanding. A true idea is distinguished from a false idea not so much by its extrinsic object as by its intrinsic nature . . . whence it follows that there is in ideas something real whereby the true are distinguished from the false" (*On the Improvement of the Understanding*, pp 25, 26).

The intrinsic quality "of a true idea is that it is *adequate*. An adequate idea is one that is in God, inasmuch as He constitutes the essence of the human soul. When an idea is in God, not only inasmuch as He is the essence of the human soul, but in so far as He has at the same time the idea of another thing, this idea is, only partially in us, in other words it is *inadequate*. It is precisely in this privation of knowledge that lies the falseness of ideas. All ideas are true and adequate in God. We recognize an adequate idea in that it is clear and distinct, and inadequate in that it is mutilated and confused (*Eth.* II, 35, 36). As the adequate idea is of itself true, the criterion of the truth of ideas is their clearness and distinctness. "Ideas that are clear and distinct can never be false"; but this is because the human mind is in their case not distinct from the divine.

The clear and distinct idea not only excludes fiction and falseness, but doubt.

"In proportion as the understanding is smaller and its experience multiplex, so will its power of coining fictions be larger, whereas, as the understanding increases, its capacity for entertaining fictitious ideas becomes less (*On the Improvement of the Understanding*, p. 21). If there be a God or omniscient Being, such an one cannot form fictitious hypotheses. . . . Fiction cannot be concerned with eternal truths (*Ibid.* p. 19). . . . We need therefore be in no fear of forming hypotheses as long as we have a clear and distinct perception of what is involved" (*Ibid.* p. 23).

The clear and distinct idea also excludes doubt, because doubt is merely the result of two confused ideas which contradict each other. A true idea carries with it immediate certitude.

"He who has a true idea knows at the same time that he has a true idea, nor can he doubt of the truth of the thing (*The Ethics*, Prt. II, Prop. 43). . . . What can there be more clear and more certain than a true idea as a standard of truth? Even as light displays both itself and darkness, so is truth a standard both of itself and of falsity (*Ibid.* note). . . . Our mind, in so far as it perceives things truly, is part of the infinite intellect of God; therefore, the clear and distinct ideas of the mind are as necessarily true as the ideas of God (*Ibid.*). . . .

No one can know the nature of the highest certainty unless he possesses an adequate idea of the subjective essence of a thing; for certainty is identical with such subjective essence" (*On the Improvement of the Understanding*, p. 13).

Holding such a theory, Spinoza had naturally no sympathy with the sceptics. If a clear idea carries certitude along with it, lack of certitude comes from the absence of any clear idea; and as it is the nature of the understanding to have clear ideas, the sceptic is, by this same fact relegated to the order of brutes. The sceptic requires proof of proof *ad infinitum*.

"To this I make answer that, if by some happy chance anyone had adopted this method in his investigations of nature—that is, if he had acquired new ideas in the proper order, according to the standard of the original true idea, he would never have doubted the truth of his knowledge, inasmuch as truth, as we have shown, makes itself manifest, and knowledge of all things would flow as it were spontaneously towards him" (*Ibid.* p. 16).

The *Ethics* is, in fact, Spinoza's reply to scepticism. It reproduces the order of nature and thus makes doubt impossible.

"If there yet remains some sceptic who doubts of our primary truth, and of all the deductions we make, taking such truth as our standard, he must either be arguing in bad faith, or we must confess that there are some men in complete mental blindness, either innate or due to misconceptions. . . . With such persons one should not speak of sciences. . . . If they deny, grant, or gainsay, they know not that they deny, grant, or gainsay, so that they ought to be regarded as automatics utterly devoid of intelligence" (*Ibid.* p. 17).

Leibnitz: Intuitive, Demonstrative, and Sensible Certitude.

Leibnitz distinguishes three kinds of knowledge, the intuitive, the demonstrative, and the sensible (*New Essays*, IV, 2), and he attributes certitude to these three kinds, which he calls certain knowledge, in contrast to probable knowledge (*Ibid.* 14). Thus there are three kinds of certitude, the intuitive, the demonstrative, and the sensible.

Intuitive certitude comprises two classes of truths: primary truths of fact, and primary truths of reason, both of which are immediately known. Primary truths of fact are the result of an immediate inner experience: e.g. the general proposition, *I think, therefore I am*, or the particular proposition, *I think of such or such an object*.

"The primary truths of reason are those which I call by the general name of *identical*. . . . And in this way all adequate definitions contain primary truths of reason, and consequently intuitive knowledge" (*New Essays*, IV, ii, 1). "Now this intuition which makes known our existence to ourselves makes it known to us with an evidence complete, incapable of being proved, and having no need of proof: so that even when I attempt to doubt all things this doubt itself does not allow me to doubt my own existence" (IV, ix, 3). "Truths of reason are necessary, and those of fact are contingent. . . . You see by this that all primary truths of reason or of fact have this in common, that they cannot be proved by anything more certain" (IV, ii, 1). "And I add that the immediate apperception of our existence and of our thoughts furnishes us the first truths *a posteriori*, or of fact, *i.e.* the first experiences; just as identical propositions contain the first truths *a priori*, or of reason, *i.e.* the first lights (*les premières lumières*). Both are incapable of proof, and may be called immediate, the former because of the immediate relation of the understanding and its object, the latter because of the immediate relation of the subject and the predicate" (IV, ix, 2).

Demonstrative certainty can be reduced to intuitive certainty. The act by which we draw a conclusion is a simple act of intuition which involves in a single apperception both premisses and conclusion. Demonstrative certainty is merely intuitive certainty applied to the relation between propositions instead of to a single truth.

There remains sensible certainty. "We know our own existence by intuition, that of God by demonstration, and that of other objects through sensation" (*Ibid.* IV, ix, 2). That we have in sensation the idea of an object external to ourselves is incontestable. The question is whether we have the right to trust this instinctive belief. According to Leibnitz, sensible knowledge, as well as the other kinds of knowledge, gives certainty. But again, a criterion is required to distinguish real sensible knowledge from the illusions of our waking hours or of our dreams. This criterion cannot be the liveliness of the representations.

"Although feelings are wont to be more vivid than imaginations, it is nevertheless a fact that there are cases where imaginative persons are impressed as much, or perhaps more, by their imaginations than others are by the truth of things. So that I think the true criterion concerning the objects of the senses is the connection of the phenomena, *i.e.* the connection of that which takes place in different places and times, and in the experience of different men who are themselves each to the

others very important phenomena in this respect. And the connection of the phenomena, which guarantees the truths of fact in respect to sensible things outside of us, is verified by means of the truths of reason just as the phenomena of optics are explained by geometry" (*Ibid.* IV, ii, 14).

Sensible certainty rests then on the primary truths of reason: it consists of inner direct experiences subjected to the law of rational truth, and is thus a form of intuitive certainty. Leibnitz, like all the Cartesians, does not allow any direct value to sensible certainty. Whether the union of the soul and the body is due to the laws of occasional causes or to a pre-established harmony, we must always go back to the Author of these laws for a guarantee of the existence of a reality external to ourselves.

"... Our thoughts come to us from the depths of our own nature, other creatures being unable to have an immediate influence upon the soul. Besides, the ground of our certitude in regard to universal and eternal truths is in the ideas themselves, . . . and the basis of the truth of contingent and singular things is in the succession, which causes these phenomena of the senses to be rightly united as the intelligible truths demand (IV, iv, 5). It must, however, be admitted that none of this certitude is of the highest degree, . . . For it, is not impossible, metaphysically speaking, that our knowledge may be a continuous dream lasting as long as life; but it is a thing as *contrary to reason* as would be the idea of a book put together by chance, by throwing the type pell-mell" (IV, ii, 14).

* Sensible certainty rests ultimately on rational certainty, on the harmony between phenomena and the requirements of reason. "The truth of sensible things is justified by their connection, which depends upon the intellectual truths grounded in reason and upon constant observations of the sensible things themselves, even when the reasons do not appear" (*Ibid.* xi, 10).

Berkeley attempts to re-establish Sensible Certainty.

Berkeley desired to avoid scepticism; in fact his Idealism (or rather Immaterialism) was the result of his attempt to do so.

"That there is no such thing as what philosophers call *material substance* I am seriously persuaded; but if I were made to see anything absurd or sceptical in this I should then have the same reason to renounce this that I imagine I have now to reject the contrary opinion" (1st *Dial. Hylas and Phil.*).

The originality of Berkeley consisted in his denying the existence of matter, in order to restore to sensible certainty its full authority.

"When therefore they [sensible things] are actually perceived there can be no doubt of their existence. Away, then, with all that scepticism, all those ridiculous philosophical doubts. What a jest is it for a philosopher to question the existence of sensible things till he hath it proved from the veracity of God; or to pretend our knowledge in this point falls short of intuition or demonstration! I might as well doubt of my own being, as of the being of those things I actually see and feel. . . . I do therefore assert that I am as certain as of my own being, that there are bodies or corporal substances (meaning the things I perceive by my senses)" (3rd *Dialogue*).

Here Berkeley attacks an opinion which was common to all Cartesians, namely, that the existence of mind is more certain than the existence of bodies. The knowledge we acquire through our senses is as certain and as immediate as that given to us by consciousness.

Even the existence of God he founds on sensible knowledge.

"To me it is evident for two reasons you allow of, that sensible things cannot exist otherwise than in a mind or spirit. Whence I conclude, not that they have no real existence but that, seeing they depend not on my thought and have an existence distinct from being perceived by me, *there must be some other mind wherein they exist.* As sure, therefore, as the sensible world really exists, so sure is there an infinite omnipresent Spirit, who contains and supports it" (2nd *Dialogue*).

Thus Berkeley reverses the order adopted in the Cartesian school. Sensible certainty is not founded on divine veracity; it is, on the contrary, on the veracity of our senses that the existence of God is founded. We have only two kinds of certainty: intuitive or immediate certainty, which comprises the data of sense as well as those of consciousness, and demonstrative or mediate certainty which is based on the former. In this way Berkeley reconciles his Idealism (or Immaterialism) with a firm belief in the veracity of our senses; his Idealism is in fact intended to guarantee their veracity. If he rejects the existence of a material substance, if he makes the reality of things lie in ideas, it is because the opposite theory inevitably ends in scepticism. "Can you produce so much as one argument against the

reality of corporeal things, or in behalf of that avowed utter ignorance of their natures, which does not suppose their reality to consist in an external absolute existence? Upon this supposition, indeed, the objections from the change of colours in a pigeon's neck or the appearance of the broken oar in the water, must be allowed to have weight" (3rd Dial.).

Empirical Scepticism of Hume; Theory of Belief.

Locke had not considered what might be the ultimate consequences of his empirical theory of human knowledge. His good sense made all extremes repugnant to him. He had accepted certainty as a fact, and based it entirely upon intuitive knowledge.

• "This part of knowledge is irresistible, and like bright sunshine forces itself immediately to be perceived as soon as ever the mind turns its view that way; and leaves no room for hesitation, doubt, or examination, but the mind is presently filled with the clear light of it. It is on this intuition that depend all the certainty and evidence of all our knowledge, which certainty everyone finds to be so great that he cannot imagine, and therefore does not require, a greater; for a man cannot conceive himself capable of a greater certainty than to know that any idea in his mind is such as he perceives it to be; and that two ideas, wherein he perceives a difference, are different and not precisely the same. He that demands a greater certainty than this, demands he knows not what, and shows only that he has a mind to be a sceptic, without being able to be so" (Locke, *In the Human Understanding*, IV, II, 1).

Hume, with the boldness of a true philosopher, draws the sceptical inferences which are logically implied in empiricism. He carried on Berkeley's analytic method and founded modern scepticism. Like Berkeley, he accepts all that is immediately revealed to us by our senses, and nothing more. Because our direct experience never makes known to us a substratum of any kind, he denies the existence of any *substance*, either spiritual or material, and reduces to a collection of sensations, not only the notion of matter, but also that of mind. Our internal like our external experience gives us nothing but perceptions. The idea of an ego is therefore reducible to a series of sensations. There is then only one thing regarding which certainty is possible, namely, our perceptions and the relations between them, and certainty has only one source, namely, our immediate experience.

"Now since nothing is ever present to the mind but perceptions, and since all ideas are derived from something antecedently present to the mind, it follows that 'tis impossible for us so much as to conceive or form an idea of any thing specifically different from ideas and impressions. Let us fix our attention out of ourselves as much as possible: let us chase our imagination to the heavens, or to the utmost limits of the universe, we never really advance a step beyond ourselves, nor can we conceive any kind of existence, but those perceptions, which have appeared in that narrow compass. This is the universe of the imagination, nor have we any idea but what is there produced" (*Treatise of Human Nature; Of the Understanding*, Part II, Sect. VI).

But, if every object of knowledge can be reduced by critical reflection into impressions and ideas, or copies of impressions (see Vol. I, Ch. III, *Problem of External Perception*), it is certainly not in that form that the human mind appears to itself. Hume had therefore to explain how thought remains possible on his hypothesis; how it is that we do not attribute existence equally to all our perceptions; how fact is distinguished from fancy. All the objects to which we apply our reason may be divided into two kinds: *Relations of Ideas*, and *Matters of Fact*. To the first class belong the mathematical sciences—geometry, algebra, etc. Their characteristic is that judgments concerning them may be formed by the operation of the mind alone, without regard to what takes place in fact in the universe. The propositions of Euclid remain true whether there are triangles or circles in the natural world or not.

As regards matters of fact, the imagination can always conceive two contrary phenomena as possible, because such conceptions are not self-contradictory. The judgment, "the sun will not rise to-morrow," is as intelligible as the judgment, "the sun will rise to-morrow." What then, beyond the actual testimony of our senses, is the nature of the evidence which shall assure us of the real existence of matters of fact? All our reasoning concerning matters of fact is based on the relation of cause and effect; but the principle of causality is nothing else than habit.

"After the constant conjunction of two objects, heat and flame, for instance, weight and solidity, we are determined by custom alone to expect the one from the appearance of the other. This hypothesis seems even the only one, which explains the difficulty why we draw from a

thousand instances an inference which we are not able to draw from one instance, that is in no respect different from them. Reason is incapable of any such variation? The conclusions which it draws from considering one circle are the same which it would form upon surveying all the circles in the universe. . . . Custom, then, is the great guide of human life. It is that principle alone which renders our experience useful to us and makes us expect for the future, a similar train of events with those which have appeared in the past. Without the influence of custom, we should be entirely ignorant of every matter of fact, beyond what is immediately present to the memory and senses. . . . Having found, in many instances, that any two kinds of objects, flame and heat, snow and cold, have always been conjoined together; if flame and snow be presented anew to the senses the mind is carried by custom to expect heat or cold, and to believe, that such a quality does exist, and will discover itself upon a nearer approach. . . . It is an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love when we receive benefits, or hatred, when we meet with injuries. All these operations are a species of natural instincts which no reasoning or process of thought and understanding is able either to produce or to prevent" (*Inquiry concerning the Human Understanding*, V, 1).

We are now able to determine the difference between fact and fiction.

"Tis also evident, that the idea of existence is nothing different from the idea of any object, and that when after the simple conception of anything, we conceive it as existent, we in reality make no addition to or alteration on our first idea. . . . But as 'tis certain there is a great difference betwixt the simple conception of the existence of an object and the belief of it, and as this difference lies not in the parts or composition of the idea which we conceive, it follows that it must lie in the manner in which we conceive it. . . . So that as belief does nothing but vary the manner in which we conceive any object, it can only bestow on our ideas an additional force and vivacity" (*Treatise of Human Nature*, Bk. I, Pt. III, 7).

Fact, then, is only distinguished from fiction by the feeling which accompanies it. The difference is a purely subjective one.

"I conclude, by an induction which seems to me very evident, that an opinion or belief is nothing but an idea, that is different from a fiction, not in the nature or the order of its parts, but in the manner of its being conceived. But when I would explain this manner, I scarce find any word that fully answers the case, but am obliged to have recourse to everyone's feeling. . . . An idea assented to feels different from a fictitious idea, that the fancy alone presents to us. And this different feeling I

endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*. This variety of terms, which may seem so unphilosophical, is intended only to express that act of the mind, which renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination" (*Ibid.* Appendix).²

In the case of an actual sensation, its liveliness, which is greater than that of images, suffices to distinguish it from a mere illusion. But in a case where the object is absent am I incapable of distinguishing the real from the imaginary? Am I in such a state, of indetermination as to expect that a particular object may be followed, indifferently, by any other object? The future is not indeterminate any more than the present, nor is it given over to illusion; for habit and the feeling by which it is characterized intervene. When I throw a piece of wood into the fire, I expect to see a flame, and I believe that there will be one.

"Belief is nothing but a more vivid, lively, forcible, firm, steady conception of an object than what the imagination alone is ever able to attain. . . . And this *manner* of conception arises from a customary conjunction of the object with something present to the memory or senses. . . . Whenever any object is presented to the memory or senses, it immediately, by the force of custom, carries the imagination to conceive that object, which is usually conjoined to it; and this conception is attended with a feeling or sentiment, different from the loose reveries of the fancy" (*Inquiry concerning Human Understanding*, V, 2).³

Thus there is no intrinsic difference between the real and the fictitious. All that differs is our inward feeling. We believe some things, we do not believe others: this is all that can be said. But is this difference of feeling justified by the nature of things? We cannot know, for we do not even know whether there are things. Positive knowledge is based on the principle of causality, and this principle is only a habit and merely expresses a subjective necessity; it does not govern facts, but is derived from them. This sceptical analysis might well discourage us, if nature had not given the strength of an instinct, or of a mechanical tendency, to this belief. "Nature, by an absolute and uncontrollable necessity has determined us to judge as well as to breathe and feel. . . . Reasoning and belief is some sensation or peculiar manner of conception, which 'tis

impossible for mere ideas or reflections to destroy" (*Treatise*, Bk. I, Part IV, Sect. 1).

We have seen that Hume separates the beliefs founded on intuition from those based on demonstration, or the relations of ideas.

"With regard to propositions that are proved by intuition or demonstration . . . the person who assents, not only conceives the ideas, according to the proposition, but is necessarily determined to conceive them in that particular manner, either immediately, or by the interposition of other ideas. . . . Nor is it possible for the imagination to conceive anything contrary to a demonstration" (*Ibid.* Part III, 7).

Our belief in the relations of ideas is also a subjective feeling, but it has the peculiar characteristic of necessity. We cannot conceive the contrary of mathematical truths. Nevertheless, there are reasons for doubting them.

"Our reason must be considered as a kind of cause, of which truth is the natural effect; but such a one as, by the irruption of other causes, and by the inconstancy of our mental powers, may frequently be prevented. By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding, and according to the simplicity or intricacy of the question" (*Ibid.* IV, 1).

It is not easy to see how Hume, on his own principles, was justified in making this distinction between mathematical and other knowledge. For, on the empirical hypothesis, the former, not less than the latter, is concerned with facts alone. Stuart Mill had only to show by his theory of inseparable association that the mathematical definitions and axioms are arrived at by induction, like all other truths, in order to complete the sceptical work of Hume.

In modern times scepticism has taken the form of Phenomenalism. According to this doctrine, certainty is merely a subjective state of the mind. There is no such thing as a principle of thought. We have only mental habits. Our judgments and reasonings are happy accidents, facts which must not be analysed too closely, lest we reduce them to nothing. To one who reflects, certainty would be impossible even as a subjective state, were not the force of nature greater than that of all the arguments of the sceptics. Knowledge is the result of our past experience, which, by induction we project

into the future. As for this induction itself, it is an unexplained mental operation which is instinctive and natural to us. But the human mind could never be convinced by any reasoning from the principle that, "Cases we have not experienced must resemble those we have experienced."

Kant : Criterion of Truth ; certitude, Faith and Opinion ; Scientific Certitude ; Impossibility of Metaphysics ; Moral Faith.

The problem of knowledge seemed now to have gone back to the point at which Greek Philosophy had left it. Hume, in fact, alludes to the sages of the Academy as the ideal philosophers. The great Rationalistic systems of Descartes and Leibnitz seemed, like those of Plato and Aristotle long ago, to have had no other effect than to provoke a more lively reaction on the part of scepticism. One thing, however, had, in modern times, assumed an importance which it did not possess in antiquity. For two centuries science had been independent of philosophy, and, while metaphysical systems were conflicting with and superseding one another, science was progressing with a continuous development. Here was a fact which scepticism now found itself obliged to take into account. The arguments which the ancients and Montaigne based on our ignorance of natural things, now appeared childish and superannuated. Hume dared not now advocate the suspension of judgment, or attack the results of science. Science could bid defiance to scepticism, for it had success on its side. He who would offer a defence and a guarantee of science on philosophical grounds would find himself supported by science itself. Kant recognized this, and undertook the part. He desired to escape from Hume's scepticism, and to give science a sure basis without making it rest on metaphysical dogmatism, which seemed fated to be for ever bringing about its own destruction.

Kant applies to the problem of certitude his distinction between the subject and the object, the matter and the form of knowledge. What is the criterion of truth? Shall we find it in the object of knowledge?

"Truth is said to consist in the agreement of knowledge with the object. . . . Then my knowledge, in order to be true, must agree with the object. Now, I can only compare the object with my knowledge

by this means, namely, *by taking knowledge of it*. My knowledge, then, is to be verified by itself, which is far from being sufficient for truth. For as the object is external to me, and the knowledge is in me, I can only judge whether my knowledge of the object agrees with my knowledge of the object. Such a circle in explanation, was called by the ancients *Diallelos*, and the logicians were accused of this fallacy by the sceptics, who remarked that this account of truth was as if a man before a judicial tribunal should make a statement and appeal in support of it to a witness whom no one knows, but who defends his own credibility by saying that the man who had called him as witness was an honourable man. The charge was certainly well founded, only the solution of the problem referred to is absolutely impossible for any man" (*Logic*, Introd. trans. by T. K. Abbott).

Kant shows that a universal *material* criterion of truth is not only impossible but self-contradictory; for it would have to abstract from every difference between the objects, and at the same time, as a material criterion, serve for their distinction. A *formal*, general criterion, on the other hand, immediately appears as possible.

"For *formal* truth consists simply in the agreement of the cognition with itself when we abstract from all objects whatever, and from every distinction of objects. And hence the universal formal criteria of truth are nothing but universal logical marks of the agreement of cognitions with themselves, or what is the same thing, with the general laws of the understanding and the reason" (*Ibid.* VII).

Kant sets up three universal and purely formal or logical criteria of truth: *Firstly, the principle of contradiction or of identity*, which determines the inner possibility of knowledge in problematical judgments. This is a purely negative criterion; absence of contradiction is the first condition of the truth of a statement, but it is not the only condition. *Secondly, the principle of sufficient reason*, which serves as a basis of the (logical) reality of a knowledge, in other words, which establishes that the knowledge is well founded as matter of assertorial judgments. *Thirdly, the principle of the excluded middle*, which is the foundation of the logical necessity of a judgment and which establishes that we must necessarily judge thus, that is to say, that the contrary is false; this is the principle of apodictic judgments.

"Truth is an *objective property* of knowledge; but the judgment by which a thing is thought as true—and which has reference to under-

standing, and therefore to a special thinking subject—is *subjective*; it is *assent* (*Fürwahrhalten*). Assent in general is of two kinds—*certain* or *uncertain*. *Certain assent*, or *certainty*, is joined with consciousness of necessity; the uncertain, on the contrary, or *uncertainty*, is joined with the consciousness of contingency, or the possibility of the opposite. The latter, again, is either *subjectively as well as objectively inadequate*; or it is *objectively inadequate*, but *subjectively adequate*. The former must be called Opinion, the latter Belief. There are, then, three sorts or modes of assent—Opinion, Belief, and Knowledge. Opinion is a *problematical*, Belief an *assertorial*, and Knowledge an *apodictic* judging. For what I hold merely as opinion, this in judging I consciously regard as only *problematical*; what I believe, I regard as *assertorial*, not, however, as objectively, but as *subjectively necessary* (valid only for me); finally, what I *know*, I regard as *apodictically certain*, that is as universally and objectively necessary (valid for all). . . . Thus, for instance, our assent to the immortality of the soul would be merely *problematical*, in case we only act as if we were immortal; *assertorial*, in case we believe that we are immortal; and, lastly, *apodictic*, in case we *all* knew that there is another life after this" (*Ibid.* IX).

Certainty, that is to say, the belief that flows from a subjectively and objectively valid principle of knowledge, is either empirical or rational according as it is founded on experience or on reason. Rational or *a priori* certainty is either mathematical or philosophical. The former is intuitive, the latter discursive. Rational certitude is distinguished from empirical by the consciousness of necessity. One is apodictic and the other assertorial. "We are rationally certain of that which even without experience we should have discerned *a priori*. Hence it is possible that our cognitions may concern objects of experience, and yet their certainty may be both empirical and rational, namely, when we discern from *a priori* principles the truth of a proposition which is empirically certain (*Ibid.* IX).

Let us try to arrive at the meaning of these statements. If we attempt to compare our knowledge with its object we are condemned to certain failure, for how can the object known be separated from the thought that knows it? Thought must therefore be its own guarantee. We have no universal material criteria, but only formal criteria of truth. The principle of contradiction is the universal principle of all our analytic judgments, and it is a fully sufficient one. This principle is, in the second place, a universal criterion of all truth, though a

purely negative one, for it is a condition of all our judgments that they do not contradict themselves. But a judgment may be free from every contradiction and yet be false and without any foundation (*Transc. Analyt.* II, Sect. 1). Here we come upon a difficulty which appears to be insoluble. We can understand that a formal criterion, such as the principle of contradiction, will assure us of the consistency of the mind with itself, but how can a formal criterion have any objective value? But that which we are really concerned with is to attain knowledge of the world which is presented to us; and yet if we hold that our knowledge must adapt itself to objects, we cannot, without getting outside thought, find the principles which would make it legitimate.

- There remains, however, another hypothesis: let us suppose that objects adapt themselves to our knowledge. The laws of thought will then be necessary laws of phenomena, and experience, by its success, continually proves and verifies the objective value of these laws. For what in the last resort was our aim? It was to obtain a knowledge that would have a universal and necessary value, a knowledge governed by laws which impose themselves not only on our minds, but on all minds, and on the objects themselves, so far, at least, as they are thought; and this is precisely what the principles of the understanding give us. The criterion is still a formal one, but although it is not material it is now objective. In the first place, it is impossible for us to think objects outside the categories which are the forms of our understanding and the conditions of our thought. The criterion that results from their application to phenomena is therefore subjectively sufficient. In the second place, the principles of the understanding express not only the laws of my thought but of all thought; they are the forms of all objective knowledge and are universally and necessarily valid for every thinking being. Hence arises the agreement between all minds, which constitutes the unity of science and gives an objective value to our knowledge; for it is in us the product of thought operating according to general laws, and not of thought as subjective and individual.

But this is not all: phenomena are only known inasmuch as we subject them to the categories of the understanding; and on

the other hand, these *a priori* forms are, by themselves, empty, and they must be filled, as it were, by the phenomena to which they give unity. This is the condition of consciousness itself, and consequently of thought. Hence our formal criterion is also an objective criterion. The categories have objective value because they serve to bind phenomena together, because, without them, there can be no objects for thought. Thought is its own guarantee. It justifies itself by reducing the multiplicity of phenomena to the unity of the world, as it appears to it. Thought is objective because it only exists as the thought of a world which without it would crumble away into dust.

"Human reason . . . begins with principles which, in the course of experience, it *must* follow, and which seem sufficiently confirmed by experience" (*Critique of Pure Reason*, Preface to 1st Edition.)

"The *possibility of experience* is then that which gives objective reality to all our *a priori* cognitions. . . . Experience has therefore for a foundation, *a priori* principles of its form, that is to say, general rules of unity in the synthesis of phenomena, the objective reality of which rules, as necessary conditions—even of the possibility of experience, can always be shown in experience" (*Crit. of Pure Reason*, Analytic of Principles, Sect. II).

To sum up: Kant wished to provide science with impregnable principles. He was confronted by two opposing systems: empiricism, which ends logically in the scepticism of Hume, and metaphysical dogmatism, which, according to Kant, being based on a dialectical illusion, and perpetually reversed or modified in its forms, is unable to furnish a stability it does not itself possess. In order to escape from scepticism a new method was needed, namely, the Critical method. Knowledge is objective, and not, as it was for the empiricists, obtained by an accident or a lucky chance; it exists of necessity, and not merely as a matter of fact. The *a priori* concepts by themselves are only a form; the matter of knowledge is given by experience alone; consequently the application of these concepts (cause, substance, being) to objects supposed to be outside experience only ends in an empty show, which is Metaphysics. Certitude is only possible through intuitions, which are either *a priori* (mathematical) or *a posteriori* (physical).

Dogmatism is confidence in the power of reason to *extend itself a priori* by means of mere concepts without critical examination,

a method, which can have only apparent success. "In mathematics and physics scepticism has no place. Only that branch of knowledge could have given occasion to it, which is neither mathematical nor empirical—the purely philosophical. Absolute scepticism declares that everything is semblance. It distinguishes semblance from truth, and must therefore possess some mark by which it makes the distinction. Consequently it must pre-suppose a knowledge of truth, and thereby it contradicts itself" (*Log. Introd. X*).

Thus the principles of science are secure in their foundations. It would be misleading to say that Kant was a sceptic. In one sense his whole work is directed against scepticism, and tends to defend science from the uncertainties of a capricious and shifting dogmatism. But it is true, on the other hand, that he denies us the knowledge of the Absolute, and sees in the effort to make a science of metaphysics only a natural and ever-recurring illusion of the human mind.

But if objective certainty belongs to the science of phenomena alone, for truths of another class we still have faith, that is to say, a *certitude which is subjectively sufficient, though objectively insufficient*. The *Critique of Pure Reason* prepares the way for faith by establishing its legitimacy. If we have a scientific knowledge of phenomena only, we know nothing whatsoever of things in themselves, of noumena. The principle of causality, for instance, has no meaning outside the world of experience; we may therefore accept at the same time determinism in the world of phenomena and freedom in the world of noumena.

"I must therefore abolish knowledge to make room for belief. . . . Above all it [i.e. a system of metaphysics constructed in accordance with the Critique] will confer an inestimable benefit on morality and religion, by showing that all the objections urged against them may be silenced for ever by the Socratic method, that is, by proving the ignorance of the objector" (*Critique of Pure Reason*, Pref. to 2nd Edit.).

Knowledge is valid only of the world of phenomena. Practical reason establishes the law of duty in an *a priori* way; but this law has consequences, implies postulates, which cannot be verified in the present world and yet must be admitted, because we have not the right to give up the notion of duty. Thus, on the one side we have the world of knowledge, and on the other the world of moral faith, and

there is no contradiction between them since they do not belong to the same order.

"Belief . . . is a free assent which is only necessary in a practical *a priori* point of view ; an assent, therefore, to that which I assume from moral grounds, and so that I am certain that the *opposite* can never be proved. . . . I see myself compelled by my end, following laws of freedom, to suppose that a supreme good in the world is possible, but I cannot compel any others by reasons (belief is *free*).

"Rational belief, then, can never reach to theoretical knowledge. It is only a supposition of the reason in a subjective but absolutely necessary practical point of view. The mental disposition which accords with moral laws leads to an object of elective will, determinable by pure reason. The assumption of the feasibility of this object, and therefore also of the actuality of its cause, is a *moral* or free belief, and in the moral point of view of the fulfilment of its end it is a necessary assent. . . . That man is morally *unbelieving* who does not accept that which, though *impossible* to know is *morally necessary* to suppose. A want of moral interest always lies at the root of this kind of unbelief. The higher the moral character of a man the more firm and vivid will be his belief in everything which he feels himself compelled from moral interest to accept or suppose in a practically necessary point of view. . . . Belief, therefore, on account of its merely subjective reasons, does not give a conviction that can be communicated to others, or command universal assent, like the conviction that comes from knowledge. Only I myself, can be certain of the validity and unchangeableness of my practical belief ; and my belief in the truth of a proposition or the actuality of a thing, is that which in relation to me takes the place of a cognition without being itself a cognition. Complete assent from subjective reasons which, for *practical purposes*, are as valid as objective, is also conviction, only not logical but *practical* (*I am certain*). And this practical conviction, a *moral rational belief*, is often firmer than any knowledge" (*Logic*, Introd. IX.)

To sum up: objective certitude, according to Kant, is found only in knowledge that is based on the necessary agreement of minds with one another and with phenomena. But the world of noumena, being unknown to us, allows of the hypotheses which faith supplies. These hypotheses are not arbitrary, but depend upon subjective necessities ; and are the consequences of the principle of practical reason, which is the law of duty. It is no doubt impossible to verify these hypotheses, to show their realization in facts ; they have therefore no objective certainty, but we have no more right to give them up than to give up duty, of which they (free-

dom, immortality, and God) are the postulates; and hence they have a certainty of a peculiar character,—moral faith, which is as much a thing of will as of intellect.

Positivism has no Philosophical Value unless it is founded on Kant's Criticism: Herbert Spencer's Inconsistencies.

In opposition to scepticism and dogmatism and with the result of destroying both in so far as they claimed to be absolute, Kant founded a new method, namely, the Critical method. Criticism came between science and metaphysics, presenting itself as the only possible philosophy, which ensured certitude for science, and reduced metaphysics to an empty show. Positivism seized upon this distinction; and in this respect, is an offshoot of the Kantian system. For the Positivists put the theories of Kant into practice, saying that science alone is certain, and that it is with science alone that we should occupy ourselves. We only know facts and their laws; metaphysics is an illusion which criticism has undertaken, once for all, to dispel, or at least to warn us against, and we cannot again return to it.

Positivism is not only an application of the Kantian idea, but it could not have existed without the support of the *Critique*. It was owing to Kant that Positivism was able to associate itself with science, while renouncing all Philosophy; before Kant Positivism might have been possible, but it could not have justified itself. The human mind may exercise its speculative activity in three domains: those of metaphysics, criticism, and positive science; but metaphysics exists only as an illusion to be dispelled—a task which Criticism performed, while at the same time it established the principles of science. The task of Criticism being completed, there remains to us only positive science, which has an indefinite province wherein it may extend its conquests in all security. Hence we must be sceptical as regards metaphysics, dogmatical as regards science.

Thus Positivism is an unconscious development of Kant's conception; and it is the only form of scepticism that remains possible. The ancients confounded philosophy with science. The sceptics, down to Montaigne, questioned the possibility of all science; but gradually science separated itself from philosophy, and took a place apart. With Descartes and

Leibnitz it was still, at least in its principles, dependent on metaphysics, but with Kant the separation became complete; metaphysics on the one side, and science on the other, were respectively synonymous with illusion and certitude. Scepticism invaded one and respected the other, destroying metaphysics only to make science more secure; in theory it became Criticism, in practice Positivism. It was, therefore, only because it mistook its own interests that Positivism could ally itself with Empiricism; for Empiricism deprives it of every guarantee, and leaves it without any support. Hume had said the last word of this doctrine. In Criticism something absolute remains, namely, the laws of the understanding; in Empiricism everything is accidental; probability takes the place of truth, and this unwarranted probability destroys itself the moment it begins to reflect on its own conditions.

But Positivism has not always been content to profit by the results of the Kantian criticism without questioning them. In his *First Principles* Herbert Spencer endeavours to present knowledge as a whole, in a systematic form, and at the same time to justify the relinquishment of all metaphysics. Metaphysics, he says, has the unknowable for its object, and only exists as a natural disposition; science is of the knowable and the certain.

Herbert Spencer's criticism is both formal and material; on the one hand he proves, by the relativity of all knowledge, the formal impossibility of conceiving the Absolute; on the other hand, he examines and exposes the nullity of the metaphysical conceptions. This double criticism is governed by one principle: That which is logically inconceivable is false; the criterion of truth is the inconceivability of the contrary. This criterion is applied in the positive part of his work (the sphere of the knowable). All the principles of science are reduced to one supreme law, the law of the persistence of force. This principle is undemonstrable, and "must be so," for it is the basis of all scientific demonstration; but it cannot be denied without contradiction: it appears to us as necessary, therefore it is true.

"There must exist some principle which, as being the basis of science, cannot be established by science. All reasoned-out conclusions whatever

must rest on some postulate. As before shown we cannot go on merging derivative truths in those wider and wider truths from which they are derived, without reaching at last a widest truth which can be merged in no other, or derived from no other. And whoever contemplates the relation in which it stands to the truths of science in general, will see that this truth transcending demonstration is the persistence of force.

"By the persistence of force, we really mean the persistence of some cause which transcends our knowledge and conception. In asserting it we assert an unconditioned reality, without beginning or end" (*First Principles*, p. 192).

- Here Herbert Spencer forgets his own empiricism: no repetition of experiences, whether of the individual or of the species, can explain the absolute universality and necessity attributed by him to this principle. It is a return to the *a priori*ism of Kant. Spencer establishes determinism *a priori*!

Another contradiction is implied in Herbert Spencer's system: if the inconceivability of the contrary is the criterion of truth, how can science lead to the affirmation of the existence of an Absolute (*i.e.* permanent force) when the formal criterion of knowledge has proved the inconceivability of the Absolute? Spencer, it is true, makes a distinction, which he has borrowed from Kant (*Log. Introd.* V), between *definite* and *indefinite* consciousness, that is, between the logical and the psychological; but the contradiction remains nevertheless. Are we to refer this Absolute to our definite or to our indefinite consciousness? Herbert Spencer does not tell us, and this indecision deprives his criterion of all value. For, can both the inconceivability of the Absolute and the necessity of conceiving it be logically proved at the same time? The Absolute was to be inconceivable, and yet we cannot deny it without affirming it. In its too anxious endeavour to be profound, Herbert Spencer's positivism, like his empiricism, falls into self-contradiction. It is at bottom an unconscious return to dogmatism.

Conclusions.

One thing is certain: the scepticism of ancient times is now a matter of past history. In our time there are no Pyrrhonians; no one dreams of contesting the possibility of the mathematical or physical sciences; no one proposes that man should suspend his judgment concerning all things.

Ancient scepticism has been replaced by two systems, both of which claim to have marked out the limits of thought, and to have done so with the object of defining the domain in which its activity may be exercised with fruitful results.

Empiricism professes to represent science, and to employ in the study of the phenomena of thought, the methods that have been so fruitful in the study of natural phenomena. One may say, it is true, that "scepticism is the natural and ever-reappearing fruit of empiricism," since all our principles have in the last resort no better basis than subjective habit. "But because we have the habit of associating in a certain order the images of our past sensations, does it follow that our future sensations must succeed each other in the same order? . . . What the empiricists call thought, in opposition to nature, is only a collection of impressions continued beyond the moment, and growing ever more faint; and to look for the secret of the future in what is only a vain image of the past, is to undertake to discover in a dream, what is to happen to us when we are awake" (J. Lachelier, *Le Fond. de l'Induction*, pp. 29, 30). But the empiricists deny that their doctrine leads to these extreme consequences: it is their opponents that accuse them of rendering science impossible, while they pride themselves in being its only authorised representatives amongst the philosophers.

Criticism provides a reply to the two great arguments of the ancient sceptics. These attacked logical certitude in the name of the necessity of proving everything, and objective certitude in the name of the relativity of all knowledge. To the former argument, Kant answers, like Aristotle, that everything is not demonstrable, because everything does not require demonstration; but he adds to the value of his reply by his clearer indication of *a priori* knowledge. To their second argument Kant replies by making use of their own thesis, the relativity of knowledge. No doubt our knowledge is relative, but it is relative to principles that are universal, and necessary, and valid for every thinking being. In this sense it has all the objective validity we can require of it. It does not refer to the nature of things, but only to phenomena and their relations. The Absolute eludes us indeed, but if Metaphysics is given over to scepticism, Science is not.

As we have seen by the example of Herbert Spencer, it is difficult not to go from empiricism to criticism. But can Criticism itself claim to have said the last word concerning science? It would seem not, in view of the fact that out of Criticism there arose in Germany the boldest dogmatism the world has yet seen. Kant's great merit is that he transferred the problem to the nature and the conditions of thought; but the reflection on thought to which this point of view invites us, at the same time furnishes principles which permit us to go beyond it (see F. Ravaisson, *Rapport sur le prix Victor Cousin*).

CHAPTER II

MATTER

METAPHYSICS is the science of first principles and of first causes (Arist. *Met.* I, 1, Ch. II). It reaches back to principles which pre-suppose no further principles, and to the cause, or causes, which have no other cause. Whatever their particular theories may have been, those philosophers who professed to reduce the universe to its principles of existence have had to account for the unity and diversity revealed to us by the observation of phenomena. The one and the many, activity and passivity, perfection and limitation, are everywhere found mingled in the world, which is the object of our thought. Hence arose the hypothesis of a passive and manifold principle, namely matter, and of a principle of movement and unity, which is the soul, and the necessity of explaining the intercommunication and interaction of these two principles whose union is apparently contradictory. It is true that some philosophers have denied the existence of matter, and others the existence of mind, but all have had nevertheless to explain the apparent dualism which the observation of things seems to impose on us. We may therefore consider the different metaphysical systems from the point of view of the solution they offer to the problems of matter and of mind, and of the relations between them.

Hylozoism of the First Philosophers. Atomism of Democritus.

We should seek in vain among the first Greek philosophers, always excepting Democritus and the Atomists, for a clear and

distinct conception of matter as we understand it. These philosophers considered all things, as Aristotle puts it, ἐν ὧς εἶδει, "from the point of view of matter," but the conception they formed of matter was still confused and involved. The elements, which they took as constitutive principles of the physical world, were partly material and partly spiritual, and the mode according to which these elements are combined was with most of them, whatever Ritter may say to the contrary (see his *History of Greek Philosophy*), neither strictly dynamic nor expressly mechanical. •

Take for instance Thales, the first Ionic Philosopher. According to him the substance of things was water, or in a general way a humid element (Arist. *Metaph.* I, iii, 983 b, 20), but this element was not purely material, it had a soul, ψυχὴ (*De Anima*, I, v, 411 a, 7). Nor was it, properly speaking, spiritual, for this soul is, as it were, an undefined attractive and motor force, something like a magnet (*Ibid.* I, ii, 405 a, 19). Thus, Thales' conception was rather a confused kind of hylozoism; and one may say the same of the "Infinite" of Anaximander, of the "air" of Anaximenes. *Anaximenes aera deum statuit* . . . esseque immensum, et infinitum, et semper in motu (Cic. *De Nat. Deorum* I, 10).

The conception of Heraclitus shows more originality. Not that he rises above the purely physical point of view of his predecessors; it is a grave historical error to represent him as the precursor of Hegel, as Lassalle does (*Die Philosophie Heracleitos des Dunklen*, 2nd vol.). The universal principle of being is an ever-living fire, which is ignited and extinguished in accordance with a fixed rhythm: πῦρ αἰζῶν, ἀπτόμενον μέτρῳ καὶ ἀποσβεννύμενον μέτρῳ (*Frag.* 21). Fire becomes all things, and all things turn into fire (*Frag.* 49). Fire is not indeed a determinate sensible existence, but the common substratum, the substance of all sensible things.

It would seem at first sight that with Pythagoreanism the principle of the explanation of things becomes decidedly spiritual, but the Pythagorean Number must be regarded as an element (στοιχείον, Arist. *Metaph.* I, v, 985 b, 28), as the substance or material out of which things are made. Numbers are divided into odd numbers (περισσά), even numbers (ἄρτια), and odd-even numbers (ἀρτιοπέρισσα). The odd is identified with the

limited, the even with the unlimited. The formula, "everything is Number," is then equivalent to the following: Everything is formed either of things limiting or of things unlimited, or of things that are both limiting and unlimited. ἀνάγκα τὰ εἶντα εἶμεν πάντα ἢ περαίνοντα, ἢ ἄπειρα, ἢ περαίνοντά τε καὶ ἄπειρα (*Frag. of Philos.* 3). These opposite elements are united in Number. Number is thus a principle of unity and harmony. The only difference between the Pythagoreans and the Ionic philosophers is that the former seek the essence of matter, not in a single more or less subtle or dense material principle, but in Number, the most abstract principle, which they conceived as being the synthesis, the harmony, of the two opposite elements, the limited and the unlimited.

Parmenides attacks the vulgar conception of matter as multiplicity and motion. Being alone exists: Being that is one, immovable, full, always like unto itself (V, 60). Parmenides calls this Being a sphere, not as a mere poetical comparison, but as being really identical with a sphere (V, 103, 104). Matter and thought are not distinguished by him, both are contained in the conception of Being in general (V, 39, 40). The Eleatic philosophy marks, however, an important stage in the history of the theories of matter, for in it phenomena, the ephemeral modes, are for the first time distinguished from the substantial and permanent element. We shall see how, later on, philosophers returned to the Eleatic principles, and drew from them new consequences.

Empedocles holds with Parmenides that birth and destruction are mere appearances (V, 113 sq.). What appears to us to be a birth or becoming (φύσις), is merely a mixture of elements (μίξις). What we regard as annihilation (τελευτή) is merely a separation of elements (διάλλαξις) (V, 98 sq.): the primordial elements, the ῥιζώματα of things are four: water, air, earth, and fire. How does the mixture take place? The particles of a body detach themselves from the group to which they belong, to penetrate into the pores (πόροι) of another body. A new substance is not formed, there is only a displacement or re-arrangement of the elementary particles. As for the action at a distance of one body upon another, it is explained by what Empedocles calls emanations (ἀπορροαί): some infinitely small, invisible particles are detached from one

body and penetrate into the pores of another (V, 337). This action takes place more easily according as there is a greater similarity between the two bodies: for there is an affinity, a friendship between similar things (Arist. *De Gen. et Corr.* I, 8).

Anaxagoras, like Empedocles, regards birth and death as a union and separation (*Fr.* 17). But the primary substances (σπέρματα) are, according to him, infinite in number. These σπέρματα are not indeterminate, like the atoms of Democritus, they are at once perfectly definite and endlessly various in qualities (*Fr.* 3). A bone, for instance, is composed of smaller bones which have come together and combined (Lucretius, I, 834-39). Aristotle calls those elements "like" (τὰ ὁμοιομερῆ), whose combination forms the different bodies. (*De Gen. et Corr.* I, i, 314 a, 18.) •

The clearest expression of the materialistic theory to be found in philosophy, is the one given by the Atomists Leucippus and Democritus. They grant to the Eleatics that motion and becoming are impossible without Non-being, but instead of inferring from this proposition the impossibility of motion and of becoming, they deduce from it the reality of Non-being. Non-being exists by the same right as Being. Being, which the Atomists, like the Eleatics, identify with the plenum, τὸ πλῆρες, is composed of atoms, that is to say, of indivisible particles, which are eternal, qualitatively indeterminate, in number infinite, and separated from one another by Non-being or the Void, τὸ κενόν. For the cause of the motion of matter Empedocles had fallen back upon the mythical forces, love and hate, while Anaxagoras found this cause in the action of intelligence. But according to Democritus the principle of motion is not to be found in any force external to the atoms (Arist. *De Caelo*, III, 2), but in a preceding motion, and so on to infinity. This motion does not, however, occur at random, but in obedience to necessary and fixed laws: οὐδὲν ἄχρημα μίτην γίνεται, ἀλλὰ πάντα ἐκ λόγου τε καὶ ὑπ' ἀνάγκης (*Fr.* 41).

Thus everything is reduced to atoms and motion: the manner of the grouping and combination of the atoms, the primary qualities, i.e. extension and weight, constitute the essence of things. As for the secondary qualities (heat, cold, taste, smell), they come not from the object itself, but from the impression it produces on human sensation.

Pre-Socratic philosophy comes to a close in the Atomistic theory. With Democritus, Greek thought arrived at last at a clear and distinct conception of matter, and formulated with precision the great principles which are becoming every day more important in modern physical science: the indestructibility of matter, and the conservation of force; nothing comes from nothing, nothing returns to nothing (Lucretius); the reduction of all phenomena to the single fact of motion, and the government of the phenomenal world by mechanical laws. It was a great merit in Democritus that he laid down so clearly the principles of what we may call the Philosophy of Appearance.

Plato: Obscurity of his Theory of Matter.

With Socrates there commenced a reaction against the Materialism of the Physicists.

"Without having dealt himself with physical science, Socrates had yet already marked out for it the path in which it was afterwards to travel with such steady persistence. . . . The world is explained from man, not man from the universal laws of nature. In the order of natural events, then, there is presupposed throughout that antithesis of thoughts and acts, of plan and material execution, which we find in our own consciousness. . . . We see here how much of a Socratic Aristotle still was at bottom, with his antithesis of form and matter, and the government of efficient causes by the final purpose" (Lange, *History of Materialism*, trans. by E. C. Thomas, Vol. I, p. 64).

Plato's theory of matter has given rise to much discussion. What is matter according to him? Is there even, strictly speaking, such a thing as matter, a kind of reality that is different in nature from and irreducible to Ideas, and whose relation to Ideas yet constituted the world?

In the *Timæus* Plato seems to teach the existence of an eternal matter (the word *ὕλη* is not used by him in this sense), that is to say, of an indeterminate something, which is the source of becoming (*ἐκεῖνο ἐν ᾧ γίγνεται*); a kind of receptacle of generation (*πᾶσις γενέσεως ὑποδοχή*), which is as it were its nurse (*οἷον τιθήνη*); difficult of explanation and dimly seen (*χαλεπὸν καὶ ἀμυδρὸν εἶδος*) (*Tim.* 49a); an element which underlies all things (*ἐκμαγεῖον γὰρ φύσει παντὶ κεῖται*), a soft substance, the natural recipient of all impressions; the

principle out of which all things are formed, and which has itself no form and no determinate qualities, which is not accessible, like the Idea, to thought, nor like the sensible, to sensation (*Tim.* 52); which we can represent to ourselves only through a mist, and as it were in a dream (πρὸς ὃ δὴ καὶ ὀνειροπολοῦμεν βλέποντες). Again Plato calls this matter "the place" (χώρα, τόπος). Such is the obscure principle, the primitive matter which, according to the *Timæus*, exists beside the Idea as a different and primitive reality, and which by concurrence with the Idea forms the world.

• Does this dualism of the *Timæus* represent Plato's final conception of matter? Or, shall we not rather look for his last word on the subject, in the *Parmenides* and the *Sophist*, in which he endeavours to overcome this dualism? If matter is eternal, if its substance persists through every change, how can it be said that being only belongs to the Idea? Matter, even in the *Timæus*, is known neither by thought nor by sensation, and for Plato, the intelligible is the measure of the real, and what is an object neither for thought nor for sensation does not exist. If, moreover, the sensible participates both in Being and Non-being, and if all being comes to it from the Ideas, must there not be a negative principle, a Non-being, which distinguishes it from the Ideas? Are we then to attribute Subjective Idealism to Plato, to see in his matter nothing more than a confused representation of the world of ideas in the individual mind? Not to mention other arguments which might be urged against this solution, it involves a historical misconstruction, for it ascribes to Plato theories that have as a matter of fact appeared only in modern times.

The following is the solution which Zeller suggests :

"If, then, the Universal, the basis of sensible existence, is neither a material substratum nor a mere phantasy of the subjective notion, what is it? Plato tells us himself, and Aristotle agrees with him. The groundwork of all material existence is the Unlimited (ἄπειρον), Unlimitedness, conceived not as predicate, but as subject; it is the Great-and-Small, not, however, to be described as corporeal substance: it is the Non-existent, i.e. Non-being; it is empty space as the condition of separation and division. In the place of an external matter we must therefore suppose the mere form of materiality, the form of existence in space and of motion; and when the *Timæus* speaks of a matter restlessly moved, before the creation of the world, this only expresses the

thought that separation and becoming are the essential forms of all sensible existence. These forms Plato would have ^{his} regard as something objective, present in the sensible phenomenon itself, not merely in our notion. On the other hand, matter can have no reality or substantiality of its own, for all reality is in Ideas. It remains, therefore, to explain matter as the negation of the reality supposed in Ideas; as the Non-being of the Ideas, into which the latter cannot enter without dissolving its Unity in multiplicity, its Permanence in the flux of becoming, its definiteness in the unlimited possibility of augmentation and diminution, its self-identity in an eternal contradiction, its absolute Being in a combination of Being and Non-being" (Zeller, trans. by Alleyne and Goodwin, pp. 311, 312).

This solution certainly involves many difficulties, for it appears to give being to Non-being, and to make that which cannot be thought thinkable; but these difficulties are those of Platonism itself.

However this may be, the radical difference between Plato's theory and the pre-Socratic materialism is easily seen. Democritus, depriving reality of all form, of all qualitative determination, reduces it to matter. Plato occupies himself with the form, the quality, which he separates from matter, realizing and hypostatizing it in the Idea. Matter, quantity, and space, which for Democritus were the whole of reality, are for Plato only the Non-being, an indeterminate, obscure substratum underlying sensible existence.

Aristotle: Matter an Indeterminate Potentiality, has no existence without Form.

Aristotle closely unites the matter and the form which had been separated by Plato, and he attributes reality to the form in a higher transcendental world. While Plato regards the relation of form to matter as that of reality to Non-being, to Aristotle they are two correlative terms, the union of which constitutes Being. There is therefore in the real and concrete world no absolute matter, that is, no matter that has not some form or quality.

"Ἡμεῖς δὲ φάμεν μὴ εἶναι τινα ὕλην τῶν σωμάτων τῶν αἰσθητῶν, ἀλλὰ ταύτην οὐ χωριστήν, ἀλλ' αἰεὶ μετ' ἐναντιώσεως ἐξ ἧς γίνεταί τὰ καλούμενα στοιχεῖα: We say, indeed, that there is a matter in bodies which are the objects of sensations; but this matter never exists by itself or without one of the contrary forms (heat, cold, heaviness, light-

ness), out of which arise what are called the elements" (*De Gen. et Corrupt.* II, 1). Matter does not exist of itself or independently of form: τὸ δ' ἵλακὸν οὐδὲποτε καθ' αὐτὸ λεκτέον (*Met.* 1035). In itself, it is unknowable, ἄγνωστος καθ' αὐτήν (1036 a, 8), has neither quality nor quantity nor any other of those things whereby entity is defined: λέγω δ' ὕλην ἢ καθ' αὐτὴν μήτε τι, μήτε πόσον, μήτε ἄλλο μηθεὺν λέγεται οἷς ὠρίσται τὸ ὄν (*Met.* 1029 a, 20).

Thus it is only by mental abstraction that matter can be separated from form. But what is matter, considered thus in itself and in the abstract? Every being or individual object, before it exists, might have been either what it is or its opposite; before being this rather than that, it might have been indifferently either this or that. And it is precisely from this indeterminate potentiality that those contraries arise which constitute matter. ἔστι δ' ἡ μὲν ὕλη δύναμις, τὸ δ' εἶδος ἐντελέχεια (*De An.* II, 412 a, 6). The subject of all change, the condition of all becoming (*Phys.* I, 190 a, 31 sq.), namely, matter, is non-created (ἀγέννητος); and as all things that perish dissolve into it (εἰς τοῦτο ἀφίξεται ἔσχατον), it is imperishable (ἄφθαρτος) (*Phys.* I, 192 a, 28). We must distinguish this primary matter (πρώτη ὕλη), which, being without quality and existing before the elements themselves and their differences, escapes our grasp; from the last or final matter, ὕλη ἐσχάτη—ἴδιος—οἰκεία ἐκάστου, which is ready to receive such and such a form, just as the marble or the bronze is matter in relation to the statue. The transition from potentiality to actuality or from matter to form, takes place in the reality through the medium of motion.

"Motion," says M. Ravaisson, "is Non-being in Being, Non-being passing into actuality. It is no longer, as in Plato, the logical relation of the mutual exclusion of two terms, but an intermediate reality which connects them together as two moments of one existence, and in which one becomes the other. Motion is neither Being nor Non-being, neither actuality nor potentiality; rather it is both at once. It is the indivisible point of coincidence of these opposite terms, whose intimate relation to one another can be discovered by careful observation" (Ravaisson, *Méaph. d'Aristote*, I, 395).

Motion is incomplete actuality, πᾶσα κίνησις ἀτελής. It has not its end in itself but tends towards its end, which is its perfection. Perfection, or, in other words, true Being, is, then, not in matter nor in the transition from matter to form, but in

the form itself, which is the end of the motion. Matter is an imperfection, or perhaps rather a latent, possible perfection which has not yet been actualized through motion.

Aristotle's doctrine was thus different both from the doctrines of Plato and of the Ionic physicists, but while attacking these, he at the same time endeavours to reconcile them. Matter is not with him merely the non-existent. Nor is it identified with privation or with space, but is already a reality, and so far the Ionic philosophers were right. But, on the other hand, matter is an inferior, potential reality, which is not self-sufficient and cannot be isolated from form, and in this respect Plato's theory is correct.

Materialism of the Epicureans and Stoics.

After Aristotle Materialism under different forms appeared once more to triumph.

"Even by the school of Aristotle, the pure actuality of absolute thought, which was the characteristic idea of his *Metaphysics*, was gradually abandoned. The Epicureans did away with all idea of actuality and potentiality and reduced everything to an inert matter. The Stoics brought down thought once more to matter, activity to potentiality, and *Metaphysics* to a new *Physics*" (Ravaisson, *Métaph. d'Arist.* Vol. II, p. 26).

With the exception of a few details, Epicurus borrowed his atomistic explanation of the world from Democritus. Only bodies exist: τὸ πᾶν ἐστὶ σῶμα (D.L. I, 39). Bodies are formed of elementary particles, of atoms which are indivisible (*Ibid.* 56), and immutable (*Ibid.* 54), and whose essential properties are size, figure, weight. The atoms are infinite in number, and separated from one another by the void, which alone makes motion possible (*Ibid.* 42, 44). They are independent of one another (ἀπαθείς, Plut. *Adv. Colot.* 8; ἀτρέπτους καὶ ἀσυμπαθείς, *Ibid.* 10), and can have no relations except those resulting from the accidents of impact and motion. They have a natural weight, in virtue of which they fall eternally in the same direction and with the same velocity (D.L. I, 43).

But, and it is here that Epicurus departs from the doctrine of Democritus, it is necessary, in order to explain the contact of the atoms, to attribute to them the power of swerving from the straight line, and that without cause, in a certain undeter-

mined point in space and time (Lucretius, II, 221). This deviation, this swerving of the atoms, is so slight that our senses are unable to perceive it, but it is necessary and enough to explain the formation of the worlds (*Ibid.* 243). The universe thus constituted by the fortuitous concourse of atoms is governed by inflexible necessary laws. Everything can be explained mechanically by the concourse of atoms and without the intervention of intelligence or design.

For the Stoics as well as for the Epicureans it was an axiom that all that is real is corporeal: ὄντα γὰρ μόνα τὰ σώματα καλοῦσιν (Plut. *Adv. Stoic.* 30). The body is the extended, which has three dimensions: σῶμα δ' ἐστὶ τὸ τριχῶς διαστατόν (D.L. VII, 135). Not only are the human soul and God, or the Providence which pervades the universe of reason and of harmony, bodies, but so are also all those qualities which distinguish things from one another. Quality (ποιότης) is explained by the action of a breath, or spiritual fire, which from the centre of each thing spreads all through it, and, returning again from the periphery to the centre, embraces, contains it (συνέχει), and constitutes the unity and sympathy of its elements: ἡ ποιότης ἐστὶ πνεῦμα ἀντιστρέφον ἐφ' ἑαυτό.

And this theory applies not only to physical properties, but to moral qualities. Virtues and vices are bodies, that is to say, they are the result of the activity of the soul, and this activity is the result of the tension of the spiritual fire, which is the soul itself.

"Placet nostris, quod bonum est esse corpus, quia quod bonum est facit: quicquid facit corpus est. . . . Sapientiam bonum esse dicunt: sequitur, ut necesse sit illam corporalem quoque dicere" (Sen. *Ep.* 117, 2).

Strangely enough, this Materialism was not with the Stoics the basis of a mechanical explanation of life. They explained things dynamically, and few philosophers have made greater use of the theory of final causes. The body, according to them, possesses more than the mathematical properties attributed to it by the Epicureans. There are in each thing two closely related principles: a passive principle which is matter, and an active one which is force or cause.

"Dicunt ut scis, Stoici nostri, duo esse in rerum natura, ex quibus omnia fiant, causam et materiam. Materia jacet iners, res ad omnia parata,

cessatura si nemo moveat. Causa autem, id est ratio, materiam format et quocumque vult versat, ex illa varia opera producit. Esse debet ergo unde aliquid fiat, deinde a quo fiat. Hoc causa est, illud materia." (Sen. Ep. 65, 2).

Thus matter and force are the two inseparable elements which constitute each being. The passive or material element is the substance (*οὐσία*) of the body, is that by which it exists (D.L. VII, 150). Force or the active element is its quality, its manner of being (*ποιότης*). Force makes with matter but one and the same being. It moves in and with matter, and is therefore, as it were, a germ, or seed which contains from the beginning all its determinations and develops them successively, according to the laws of reason: *λόγος σπερματικός* (*Ibid.* 136). This force with which matter is informed, and which contains in itself the cause of all the changes in the body, is fire—not the coarse fire revealed to us by our senses, which, far from producing anything, destroys everything, but an ethereal fire which engenders all things with consummate art and knowledge: *πῦρ τεχνικὸν ὁδῶ βαδίζον εἰς γένεσιν* (*Ibid.* 156). The Stoics' world is not, like that of Epicurus, composed of independent parts having no interaction; everything in it, on the contrary, is bound together. One force and one reason pervades it; it is in fact a continuous and sympathetic whole: *πᾶν συνεχές, συμπαθές*. Thus, although everything is body, matter is distinguished from force. Not that the ultimate result of the system is a dualism: the primitive and divine fire is the principle of all that is. All the other elements are only metamorphoses of this fire, and matter is a relaxation and a degradation of it. And if everything comes from the divine fire, everything must return to it; our life is only a periodical episode in the divine life.

Neo-Platonism : Reaction against Materialism.

With Neo-Pythagoreanism and Neo-Platonism a new reaction against Materialism began. A doctrine that professed to explain everything by that which is visible and tangible could not be otherwise than repulsive to minds trained in the school of Plato, and already tinged with the spirit of oriental religious feeling. In the Trinity of Plotinus, the first hypothesis, the One, which is absolutely simple, cannot contain

anything analogous to matter, but in intelligence there is already plurality. •

“If there are many forms, it is necessary (*ἀνάγκη*) that there shall be something common in them; and also that there should be something peculiar to each by which one is distinguished from another. This something peculiar (*ἴδιον*), therefore, this separating difference, is the appropriate form (*μορφή*). But if there is form, there is also that which is formed (*εἰ δὲ μορφή, ἔστι καὶ τὸ μορφούμενον*), about which difference subsists (*περὶ ὃ ἡ διαφορά*). Hence there is matter (in intelligibles) which receives the form, and is always the subject of it (*ἔστιν ἄρα καὶ ἕλη ἡ τῇ μορφήν δεχομένη καὶ αἰ τὸ ὑποκείμενον*)” (Plotinus, *Enneads*, II, iv, 4).

Furthermore, our sensible world is an image of the intelligible world, and as it is composed of matter and of form, there must also be matter in the world above: *κάκει δὲ ἕλην εἶναι* (*Ibid.*). But the matter that is in the *νοῦς* must not be conceived as resembling what we call matter here below. Intelligible matter is entirely informed and animated with the higher principle, while sensible matter shuts out form. The first is Being, the second is Non-being: the first is eternal like the Idea, the second is subject to a perpetual becoming.

“Even when the matter of bodies,” says Plotinus, “becomes a definite thing, it is neither living nor thinking: it is dead in spite of its borrowed beauty. On the other hand, intelligible matter is truly real, it is living and thinking” (*Enn.* II, iv, 5).

It would seem, then, that these two kinds of matter resemble each other in name only, but there is a reason for this common name. With the second hypostasis already commences that procession which continues to go further away from unity and finds its last limit in matter. •

What is concentrated in the intelligible world is, in the sensible world, divided and dispersed; unity becomes plurality; harmony, struggle and opposition; and eternity, time and succession. The cause of this lower existence is matter, and Plotinus returns to Plato's theory of it.

Matter is the universal substratum which persists under the mutation of the elements into each other (*ὑποδοχή, ὑποκείμενον*, *Enn.* II, iv, 6). This matter is void of form, absolutely indefinite, void of all quality (*ἄποιος*, *Ibid.* 8). In itself it does not even possess magnitude, which belongs to it only in so far as the concept magnitude is realized in it (*Ibid.*). Matter is, as in the *Timæus*, space, the natural recipient of all things. It must not

be said of matter that it is body (*σώματος*), for body is posterior to it (*ὑστερον*), and presupposes the synthesis (*σύνθετον*) of a matter and a form (*Enn.* III, vi, 7). Matter has no reality, but is merely the possibility of being; in itself it is the privation of all things, the cause to other things of their apparent substance (*ἐρημία πάντων οὐσα, ἀλλὰ γίγνεται μὲν αἰτία ἄλλοις τοῦ φαίνεσθαι*, *Enn.* III, vi, 15).

Matter, in short, is Non-being (*ἀληθινῶς μὴ ὄν*), that which is void of all reality, from which the good is absent; and it is in this sense that Plotinus calls matter "evil" (*πρώτον κακόν*, *Enn.* I, viii, 3; cf. Zeller, Vol. V, 2nd ed., p. 486).

It must be admitted that this definition gives us no positive idea of matter, and that it is difficult to conceive this nothing which is yet something.

Revival of Science. The Problem of Matter restated. The Atomism of Gassendi.

In the Middle Ages philosophers were content to follow Plato and Aristotle, especially the latter in his distinction between matter and form. We must, however, notice one exception: in Paris, in 1348, Nicolaus of Autricuria was condemned for having said that there was "nothing in the phenomena of nature beyond the movement of atoms which combines or separates them" (Prantl, *Gesch. der Log.* IV, p. 2). It was not till the 16th century that the revival of scientific investigation, and particularly the great discoveries of Copernicus and Galileo, drew attention once more to cosmological problems, and consequently to the question of the essence of matter. The consciousness of an universal life inspired at first a poetical and somewhat vague kind of Pantheism.

"The infinity of forms under which matter appears, taught Bruno, it does not receive from another and something external, but produces them from itself and engenders them from its bosom. Matter is not that *prope nihil* which some philosophers have wished to make it, and as to which they have so much contradicted each other; not that naked, mere empty capacity, without efficiency, completeness, and fact. Even though it has no form of its own it is not at least deprived of it, as ice is of heat, or as the depths are of light, but it is like the travelling mother as she expels her offspring from her womb . . . therefore matter is not without forms—nay, it contains them all; and since it unfolds what it carries concealed within itself, it is in truth all nature and the mother of all living things" (Lange, *Hist. of Materialism*, Vol. I, p. 232 of trans.).

Beside this Pantheism there appeared once more a doctrine

of Atomism. Among all the ancient philosophers Bacon gives the highest place to Democritus.

"And therefore the natural philosophy of Democritus, and some others who did not suppose a mind or reason in the frame of things, but attributed the form thereof able to maintain itself to infinite essays or proofs of nature which they term fortune, seemeth to me . . . in particularities of physical causes more real and better inquired than that of Aristotle and Plato" (*Advancement of Learning*, Bk. II, § vii). Bacon does not however wish to be "led to the doctrine of atoms, which implies the hypothesis of a vacuum, and that of the unchangeableness of matter (both false assumptions)." "We shall," he says, "be led to real particles such as really exist" (*Nov. Organ.* Bk. II).

It was by a French philosopher, Gassendi, that the atomistic conception of the universe was revived in modern times. As Lange remarks, "Among all the systems of antiquity he judiciously chose the one that is most in harmony with modern empirical tendencies." The rehabilitation of Epicurus "deserves to be ranked amongst the most original attempts of that time." In his work the *Exercitationes paradoxicae contra Aristotelem* (1624-1645), five books of which he burnt under advice of his friends, is a defence of the system of Epicurus. From a summary of the lost books we see that Gassendi adopted the system of Copernicus, and the theory of the world as expounded by Lucretius. In 1643 he commenced his polemic against Descartes with the publication of his *Disquisitiones anti-cartesianae*. Most of his writings on Epicurus as well as the exposition of his own doctrines date from 1646 to 1653. For him the universe was a coordinate whole, the constitutive elements of which were atoms. These in their turn were determinations of a permanent, indestructible principle, which is matter. No body comes from nothing. The atoms are identical in substance, but differ in form. The appearance and disappearance of things is only the reunion and separation of atoms. Gassendi, unlike the French materialists of the 18th century, does not deduce atheism from his principles. God with him is the Creator of matter.

Descartes: the Essence of Matter is Extension; Geometrical Mechanism.

"It is very evident that all that is true is something, truth being identical with existence, and I have already fully

demonstrated that whatever is clearly and distinctly known is true" (*5th Meditation*). Descartes applies this method to matter in order to determine its essence. His object is to make of matter, such as it exists in our thought, an analysis which shall free it from all its obscurities, from all its sensible qualities, and to bring out whatever in it is clear and distinct (*Ibid.*).

Any material object, a piece of wax for instance, contains a confused multitude of properties which are variable and unstable, and awaken in the thinking subject so many more or less confused conceptions. We say of this piece of wax that it has such a colour, such a form and taste, but do these expressions reveal the essence of matter? In no wise. Hold the piece of wax near the fire, and colour, odour, and taste will all melt away, and give place to an extended, soft, and flexible mass, which, however, we still call wax (*2nd Med.*); consequently all the secondary qualities which the vulgar regard as so many properties of matter are things that depend on external circumstances and on the sensibility of the subject, and do not really constitute the material object. All that we can expect of our senses is that they may indicate that which in the object will be useful or injurious to us.

"It will be sufficient to remark that the perceptions of the senses are merely to be referred to this intimate union of the human body and mind, and that they usually make us aware of what in external objects may be useful or adverse to this union, but do not present to us these objects as they are in themselves. . . . For after this observation we will without difficulty lay aside the prejudices of the senses and will have recourse to our understanding alone on this question by reflecting carefully on the ideas implanted in it by Nature" (*Prin. of Phil.* II, 3; cf. *Med.* VI).

Thus none of the secondary qualities are realities. There is nothing in them for the understanding to take hold of, and the real is that alone which is clearly perceived by the mind. The only essential and fundamental property which persists throughout all modifications, and of which the mind can have a clear and distinct knowledge, is extension, or the dimensions of length, breadth, and depth.

"I distinctly imagine that quantity which philosophers commonly call continuous, or the extension in length, breadth, and depth that is in this

quantity, or rather in the object to which it is attributed. Further, I can enumerate in it many divers parts, and attribute to each of these all sorts of sizes, figures, situations, and local motions; and in time I can assign to each of these motions all degrees of duration. And I not only know these things when I thus consider them in general; but besides, by a little attention, I discover innumerable particulars respecting figures, numbers, motion, and the like, which are so evidently true, and so accordant with my nature, that when I discover them, I do not so much appear to learn anything new, as to call to remembrance what I before knew" (5th Meditation).

Thus among all the qualities attributed by the vulgar to matter, only one, which is independent of sensation and clearly perceived by the mind, is essential to it and possesses objective reality, and this quality is extension.

"The nature of matter or body, considered in general, does not consist in its being hard, or ponderous, or coloured, or in that which affects our senses in any other way, but simply in its being a substance extended in length, breadth, and depth" (*Princ. of Phil.* II, 4).

Bodies, whose essence is extension, are not different from the space in which they are contained.

"After this examination, we will find that nothing remains in the idea of body, except that it is something extended in length, breadth, and depth, and that this something is comprised in our idea of space, not only of that which is full of body, but even of what is called void space" (*Ibid.* 11).

Space and body being identical, it follows that there is no such thing as a vacuum.

"With regard to a vacuum, in the philosophical sense of the term, that is, space in which there is no substance, it is evident that such does not exist, seeing the extension of space or internal place is not different from that of the body" (*Ibid.* II, 16).

Nor are there any atoms, that is to say, indivisible particles of matter. Every extended thing, however small we can imagine it, may be divided into two or more smaller parts, *ad infinitum* (*Ibid.* II, 20). The world, or the extended matter of which the universe is made up, is also infinite in magnitude, and no limit can be assigned to it in space (*Ibid.* II, 21). Space being full, motion is "the transporting of one part of matter or of one body from the vicinity of those bodies that are in immediate contact with it, or which we regard as at

rest, to the vicinity of other bodies" (*Ibid.* II, 25). When one part of matter is moved, another immediately takes its place; in other words, every motion is curvilinear or a vortex.

Thus we see that by a subjective method very different from that of Democritus, Descartes, nevertheless, in the same way reduces the manifold properties of matter to unity, that is, to extension. In Descartes' theory, as in that of Democritus, we have a reduction of quality to quantity; but in one it is a discrete quantity, i.e. number (the atoms were unities), and in the other a continuous quantity, namely, extension. In the place of the arithmetical mechanism of Democritus, Descartes proposes a geometrical mechanism.

Spinoza: Extension an Attribute of God; Bodies are Modes of this Attribute.

Spinoza, like Descartes, reduces all the properties of matter to extension; but, for him, extension is not a substance, but an attribute of the single substance, God, and the only one of all the infinite attributes of God, besides thought, that is accessible to human intelligence. "Extension is an attribute of God; in other words, God is an extended thing" (*Eth.* II, '2). The divine extension is infinite; only the different bodies which are its modes are finite: God, though an extended thing (*res extensa*) is indivisible.

"Substance absolutely infinite is indivisible (*The Ethics*, Part I, Prop. XIII). Proof: If it could be divided, the parts into which it was divided would either retain the nature of absolutely infinite substance, or they would not. If the former we should have several substances of the same nature, which (by Prop. V) is absurd. If the latter, then (by Prop. VII) substance absolutely infinite would cease to exist, which (by Prop. XI) is also absurd."

God is thus at once extended and indivisible. This proposition may appear contradictory to those who, being incapable of rising above the prejudices of imagination, represent the divine extension to themselves after the model of such and such a particular body. But God, though extended, is incorporeal.

"Some assert that God, like a man, consists of body and mind, and is susceptible of passions . . . all who have in any way reflected on the divine nature, deny that God has a body. Of this they find excellent proof in the fact that we understand by a body a definite quantity, so

long, so broad, so deep, bounded by a certain shape ; and it is the height of absurdity to predicate such a thing of God, a being absolutely infinite" (*Eth.*, Part I, Prop. XV note).

Because God cannot be conceived as a body, many think that extension cannot belong to God, that it is separated from the divine substance, and created by God Himself ; but they forget that extension, as it is in God, is not that divisible and even actually divided extension which is presented to us by our imagination. The manifold parts, or the different bodies of which this extension is composed, have only a phenomenal existence, and are merely the finite modes of the infinite and divine extension ; but the latter in itself has no parts.

• "It is mere foolishness, or even insanity, to say that extended substance is made up of parts or bodies really distinct from one another. It is as though we should attempt, by the aggregation and addition of many circles, to make up a square, or a triangle, or something of totally different essence. Wherefore the whole heap of arguments by which philosophers commonly endeavour to show that extended substance is finite falls to the ground by its own weight. For all such persons suppose that corporeal substance is made up of parts. In the same way, others, who have persuaded themselves that a line is made up of points, have been able to discover many arguments to show that a line is not infinitely divisible" (*Letter to Lewis Meyer*).

Bodies are the modes by which the divine extension expresses and develops itself. "By *body* I mean a mode which expresses in a certain determinate manner the essence of God in so far as He is considered as an extended thing" (*Eth.* II, Def. 1).

All bodies have something in common, all imply the concept of one and the same attribute, extension (*Eth.* II, Lemma 2). It is, therefore, not in the substance, but in the modes that the basis and origin of the difference between bodies is to be sought. Bodies may be divided, in the first place, into two principal kinds,—into simple and compound bodies. Simple bodies are distinguished from one another only by motion and rest, or by the slowness and rapidity of their motion (*Ibid.* Lemma 3, ax. 2). Simple bodies are not, however, atoms. Spinoza does not assert, any more than did Descartes, the existence of atoms and of the void. The compound bodies he defines in the following way :

"When any given bodies of the same or different magnitude are compelled by other bodies to remain in contact, or if they be moved at the same or different rates of speed, so that their mutual movement should preserve among themselves a certain fixed relation, we say that such bodies are in union, and that together they compose one body or individual, which is distinguished from other bodies by this fact of union" (*Ibid.* XIII, Def.).

The laws obeyed by the different bodies are all reducible to mechanical laws. The origin of the motion of a body is to be found in a previous motion, and so on to infinity. "A body in motion or at rest must be determined to motion or rest by another body, which other body has been determined to motion or rest by a third body, and that third again by a fourth, and so on to infinity" (*Ibid.* 13, Lemma 3). To put forth as an explanation of the motion of body any idea of design is to show ignorance of the true cause of motion, which is a mechanical one (*Eth.* I, Appendix).

Such are the laws obeyed by that part of nature which is the material universe, and such are its constitutive elements. Matter, all the properties of which can be reduced to extension, is, with thought, one of the modes by which the infinite substance or *natura naturans* reveals itself. Motion in space governed by inflexible mechanical laws and forming an unbroken chain; thoughts linked together by necessary relations—these are the two parallel series of facts by which the single, immovable, infinite substance expresses and diversifies itself.

Malebranche : Intelligible Extension and Particular Bodies.

Malebranche's theory of matter may be said to form a connecting link between the theories of Descartes and Spinoza. While on the one hand he identifies matter with extension, on the other he endeavours also to establish the dependence of extended substance on the Divine Substance. In order to prove that extension is the essence of matter, he is content to repeat the arguments used by Descartes; figure, divisibility, impenetrability, and, in a more general way, extension—of which the others are only modifications—are the qualities without which matter cannot be conceived, the qualities which constitute its essence (*Rech. de la Vérité*, III, 2nd Part, VIII, 2).

Extension, which constitutes the whole reality of matter, is not the object of mere sensible perception, but is seen by the human mind in the Divine Intelligence of which it is an idea. The idea of extension as it dwells in the infinite mind, and as seen in it by the finite mind, "intelligible extension," is thus, in the last resort, the cause and veritable substance of material phenomena, the "archetype of matter." Our perception of the divers bodies is explained by the determination, in this intelligible and general extension, of certain coloured portions; or, in other words, by the projection into extension of colour, which is a purely subjective modification of the soul.

"What is called seeing bodies is nothing else than having actually present to the mind the idea of extension, which affects or modifies the mind by different colours; for bodies are not seen directly, or immediately, as they are in themselves. It is therefore certain that bodies are seen only in the intelligible extension which is made particular and accessible to our senses by colour; and that colours are merely sensible perceptions which the mind has of extension when the latter acts upon and modifies it" (*Answer to Regis*. Ch. II).

Intelligible extension is not an abstraction. As infinite, eternal, and necessary, it can only be an idea of the Infinite Mind.

What is the relation of this intelligible and divine extension to particular bodies, as they are presented to us by our sensible perception? Do the different bodies already exist with their individual and definite forms in the intelligible extension? No.

"We must not imagine the relation between the intelligible and the material world to be of such a kind that there exists, for instance, an intelligible sun, or horse, or tree, which is destined to represent to us the sun, a horse, or a tree, and that all those who see the sun necessarily see this supposed intelligible sun" (*Rech. de la VÉR.* 10^{me} éclaircissement).

Intelligible extension is, in fact, merely a possibility of bodies having for its foundation the infinite perfections of God: a possibility no doubt, but, at the same time, a veritable reality, since it forms part of the Divine Essence. This intelligible extension becomes sensible and is particularized when it acts on the soul of man and awakens in it the consciousness of such and such a body.

"Any intelligible extension may be conceived as being round or as having the intelligible form of a horse or a tree; therefore any intelligible

extension may serve to represent the sun, a horse, or a tree, and may consequently be the sun, horse, or tree of the intelligible world, and *even become the visible and sensible sun, horse, or tree if the soul has on the occasion of these bodies some feelings to join to these ideas; in other words, if these ideas cause sensible perception in the soul*" (*Ibid.*).

Thus the world of bodies is intelligible extension divided up into a multiplicity of particular forms, and acting on the human soul in such a way as to awaken in it impressions which are more or less confused. It is a transition from potentiality to actuality, but from a potentiality which is in fact a true reality, since it forms part of the Divine Essence.

There are, thus, two stages in Malebranche's theory: in the first he abstracts from the notion of matter all that is given to us by our purely subjective sensibility (*i.e.* the secondary qualities), retaining in his definition the 'one essential and fundamental property of extension. In the second he rises above this entirely subjective point of view and reaches the Absolute, the vision of things in God. Extension then appears to him as an idea in the Divine Mind, as an intelligible and divine extension; he thus departs from the doctrine of Descartes and approaches that of Spinoza.

"Extension is a reality, and in the Infinite all realities are found. God has therefore extension as well as bodies, since He possesses all the absolute realities or every perfection; but *God is not extended in the same way as bodies are*, for He has not the limitations and imperfections of His creatures" (8th *Entretien Métaph.* 7). "The infinite and divine extension is God Himself; not the whole of God, but God seen in His relation to material creatures, in so far as He thinks these creatures and can give them being; in other words, in so far as He Himself is the Being whence they borrow their reality; in fact, in so far as He is, so to speak, their being" (Ollé-Laprune, *La phil. de Malebranche*, I, p. 203).

On Malebranche's hypothesis the real existence of bodies was superfluous, and indeed was only accepted by him on the faith of revelation which taught him that God has set forth intelligible extension in a multitude of different individual forms.

Leibnitz gives Three definitions of Matter, more and more Metaphysical.

Leibnitz analyses the idea of extension which to the Cartesians appeared to be so clear and simple, and finds that it

involves difficulties which had escaped their notice. Extension, whether we regard it, like the Cartesians, as continuous, or, like the Atomists, as discontinuous and composed of units separated by a vacuum, can in no way, according to Leibnitz, constitute the substance of matter. To regard extension as a being or substance is self-contradictory. Extension is the manifold, a compound the constituent elements of which it would be vain to seek, since it is indefinitely divisible (*Erdmann*, 123). The true reality, or substance, is force, the monad. What then is matter? Leibnitz distinguishes a *materia prima* or abstract matter which is purely passive, and a *materia secunda* or concrete matter endowed with activity. "This distinction, as the depth of its meaning gradually appears, gives rise to a theory of matter which is presented to us under three forms, each of which is more metaphysical than the other" (see M. Boutroux's admirable Introduction to the *Monadologie*, p. 53 sq.).

By considering extension, in the first place, from the physical, that is, from Descartes' own point of view, we are able to find a definition of matter which is more profound and more complete than the Cartesian.

Regarded from this point of view the *materia prima* or bare matter consists of *ἀντιρροία* or impenetrability and extension (*Erdm.* 463). *ἀντιρροία* is the attribute in virtue of which matter is in space. *Illud attributum per quod materia est in spatio* (*Ibid.*). It is a passive resistance, what is called impenetrability, inertia. This property cannot be reduced to extension; on the contrary, extension is reducible to resistance. "The primitive, passive power does not consist in extension, but in an exigency of extension. *Non in extensione sed in extensionis exigentia consistit*" (*Ibid.* 436), in the tendency to extend. Extension is a continuation, a diffusion of *ἀντιρροία* in space. It is the realization of the primitive possibility of being extended. *Ita dum antitypia continue per locum diffunditur seu extenditur, nec aliud quidquam ponitur, oritur materia in se, seu nuda* (*Ibid.* 463). When to this naked matter is added a principle of motion, an elastic force, we have the second matter, *materia secunda seu vestita*. This matter is not, like the other, merely impenetrable and mobile, but contains a principle of activity (*principium activum continet*), a super-added force, *vis activa materię superaddita*, which makes it capable of reaction (*repercutit*) (*Ibid.* 466).

So far we have considered matter in its external aspect only, let us now see what matter is when considered from an

internal point of view, that is from the point of view of the monad. The monad is a created and finite spiritual substance, existing in company and in contact with other monads, which are finite and created like itself. It is consequently not susceptible of full development; all its tendencies do not attain actuality; it is arrested, so to speak, in its expansion by its own finite character on the one hand, and on the other by its relation with the other finite monads. This passivity of the monad, this impediment to its development is what, according to Leibnitz, constitutes the *materia prima*. To this purely passive element is added in every complete substance an active principle or *entelechy*.

"*Materia prima propria id est potentia passiva primitiva, ab activa inseparabilis ipsae Entelechiæ (quum complet, ut monada, seu substantiam completum constituat) concreatur*" (*Erdm.* 456). This purely passive force inherent in every monad is the principle of antitypia and of extension; in other words, of the *materia prima* of which we have spoken above. As for the second matter, considered thus from the point of view of the monad substance, it is an aggregate of monads: "*ex pluribus monadibus resultare materiam secundam (intelligimus) cum viribus derivatis actionibus, passionibus, quæ non sunt, nisi entia per aggregationem*" (*Erdm.* 436).

The *materia secunda* is formed out of an infinite number of complete substances, each of them having its entelechy and *materia prima*, which are dominated by a central monad; in a word, it is an organic body.

The *materia secunda*, as for instance the body, is not a substance, but a mass consisting of several substances like a pond full of fish or a flock of sheep (*Erdm.* 736). Each portion may be conceived as a garden full of plants or as a pond filled with fish, but each sprig of the plant, each limb of the animal, every drop of its humours is in its turn such a garden or such a pond (*Monad.* 67, *Erdm.* 710).

To sum up: the *materia secunda*, or organic body, is the external representation, the phenomenon, and, as it were, the configuration in extension, of a group of monads or simple substances, presided over by one dominating monad. But does this representation in extension result immediately from the grouping of the monads, or does it occur by means of a *vinculum substantiale*, an intermediate principle by which the phenomena are realized? (*Lettre au P. des Bosses*). In one

or two passages Leibnitz appears to regard the *vinculum substantiale* as a reality distinct from the monads, something real and substantial which is the common subject of attributes and of modifications: *vinculum reale seu substantiale aliquid, quod sit subjectum communium seu conjungentium prædicatorum et modificationum* (Erd. 741). But his system logically excluded the existence of a special entity serving to unite the simple substances, and he expressly affirms that the *vinculum substantiale* is no more than the relation of the monads, resulting from the pre-established harmony between their activity and their passivity: *Vincula illa, quod habent reale, habebunt in modificatione cujuslibet monadalis, et harmonia seu consensu monadum inter se* (Erd. 713).

But this view of the monad as a substance acted on by and reacting upon other monads does not take us beyond the surface of things. The monad is no doubt a substance, but it is also and above all a centre of perception, an activity which develops itself spontaneously. Therefore the passive principle which dwells in every created substance, or, in other words, the *materia prima* is not, as at first appeared, an external obstacle, but an entirely internal impediment to the representation in the monad of other monads. *Substantia agit quantum potest, nisi impediatur; impeditur autem, etiam substantia simplex, sed naturaliter non nisi intus a se ipsa* (Erd. 740).

Each monad ought to represent the whole of the universe, whereas it can only represent it from its own point of view, which is not a central or absolute point of view. Each monad, therefore, has in its finite nature a principle of confused perceptions. The *materia prima* is, in the last resort, this necessary imperfection, this internal limit of the monad. As for the *materia secunda*, or the organism regarded from this point of view, it is "the grouping and arrangement of the confused perceptions terminating in a distinct perception. There is no distinct perception that does not contain in itself an infinity of inferior perceptions, and so on *ad infinitum*. The organism ultimately appears as the working of the mind organizing its perceptions" (F. Boutroux, *Op. cit.*).

Such are the three stages in Leibnitz's theory of matter. In the first, Leibnitz defines matter by extension after the manner of Descartes, but he already goes beyond the Cartesian

definition, by pointing out the passive principle of resistance *antitypia*, which is the exigency of extension and anterior to extension. In the second degree, matter, considered from the point of view of the monad as substance, appears to him as a limitation of the finite substances by one another. Lastly, no longer considering the monad as only a substance in communication with other substances, but as a centre of perception, an entirely spontaneous activity, he makes matter the internal impediment to the representation in each monad of other monads.

Berkeley and Hume deny the existence of Matter.

Leibnitz, although he reduced extension to an appearance, a rational entity, had still allowed a certain amount of objective reality to matter; the appearance was well founded, *bene fundata*. Berkeley goes further and denies that matter has any reality at all outside the mind. The primary as well as the secondary qualities are only modifications of the sensitive subject, and have no existence apart from it. When matter has thus been stripped of all its primary and secondary qualities, what remains? Nothing at all. What is the use of assuming the existence of an invisible, unknowable substratum of which we can have no positive idea, which we cannot call the cause of our impressions because we assume it to be inactive and passive. Shall we say, then, that it *underlies* its attributes? But in that case it must be defined as extended, and to do so would be to enter upon an infinite regression.

"Consequently every corporeal substance, being the substratum of extension, must have in itself another extension by which it is qualified to be a substratum, and so on to infinity" (*1st Dialogue between Hylas and Philonous*, p. 289). We must therefore abandon the notion of the external existence of a material substance, that is to say, of its existence distinct from the quality of being perceived.

Hume agrees with Berkeley in his negative conclusions: "Tis evident that . . . colours, sound, heat and cold, as far as appears to the senses, exist after the same manner with motion and solidity. . . . 'Tis also evident that colours, sound, etc., are originally on the same footing with the pain that arises from steel, and the pleasure that proceeds from a fire" (*Treatise of Human Nature* I, iv. 2).

The very idea of an external world is an illusion, for in

reality we never get beyond ourselves, beyond our subjective perceptions. There is, therefore, no material substances distinct from the mind, but only a very strongly-rooted belief in the reality of matter, in a "continued and distinct existence." Every morning we think we see the same sun that we saw the day before, but "'tis a gross illusion to suppose that our resembling perceptions are numerically the same; and 'tis this illusion, which leads us into the opinion that these perceptions are uninterrupted, and are still existent even when they are not present to the senses" (*Ibid.*).

French Materialism in the 18th Century.

The materialistic movement which arose in France in the 18th century may be traced to various causes. Materialism, which in England, from Hobbes and Newton to Hartley and Priestley, was coexisted with religious faith and deism, was used in France as an instrument against the Catholic beliefs (see Lange's *Hist. of Materialism*).

The French Materialists combined Bayle's religious scepticism with a mechanical conception of the world. La Mettrie's *Natural History of the Soul* (1745) contained the germ of theories which he himself was to develop later in his *Homme-machine*, and which were destined to make so much noise in the world. In order to know the properties of the soul which is unknown to us in its essence, we must study the properties of the body of whose essential nature we are also ignorant. Real and concrete matter is never without motion: motion is one of its essential properties, and even when it is not perceived it exists as a possibility. Matter possesses also the faculty of feeling; the hypothesis of a soul distinct from matter, having its seat either in a particular point or in some particular part of the body, is inadmissible. La Mettrie was more clear and more categorical in his famous work *l'Homme-machine* (1748). "Leibnitz," he said, "spiritualized matter instead of materializing the soul." Descartes too was wrong in his distinction of two substances. The errors of the metaphysicians arose out of their *a priori* methods; for the complicated machine, which is man, can only be known *a posteriori* through the senses and by experience. La Mettrie investigates the effect of environment, of food and education on the temperament,

and the effect of temperament on moral conduct: Man is a material machine, the soul is merely the principle of motion, a spring in the machine. "Thought is so far from being incompatible with matter that it would seem to be a property of matter, like electricity, mobility, impenetrability, and extension. In a word, man is a machine, and in the whole of the universe there is only the one substance, which is modified in divers ways."

The most important monument of the French Materialism of the 18th century is Baron d'Holbach's *Système de la Nature*. In the first part of this work he sets forth the general principles of his system; his ideas concerning nature, matter, motion and its laws. Then follow the study of man, an inquiry into the supposed differences between man as a physical being and man as a moral being, and lastly, an investigation of his origin.

The second part is devoted to the discussion and refutation of the principal arguments for the existence of God. Nature is an immense material and physical whole which contains all beings, and among them man, a purely physical and material being. Of what is this nature, this sole existing reality, composed? Of matter and motion. "The universe, that vast assemblage of all that exists, presents everywhere nothing but matter and motion. Seen as a whole it is an immense and unbroken chain of causes and effects" (p. 8).

Motion is a universal and constant fact in nature: absolute rest does not exist. But there are two kinds of motion: the motion that is communicated, or impressed on a body from outside and perceptible to us; and the internal and hidden movements which take place inside the body between its different molecules and which cannot be immediately apprehended by our senses. To this last category belong, for example, the motion which is brought about by the fermentation in the molecules of flour, the growth of a plant or an animal, and lastly, what are called the intellectual faculties of man, his thoughts, passions, volitions. In his theory of matter, d'Holbach was not strictly speaking an atomist. He admits, indeed, the existence of elementary molecules, but he maintains that the essence of these elements is unknown. We only know some of their properties, which we discern through

the effects of changes produced in our sensations (p. 25). All the modifications of matter are due to motion (p. 26). In what is called the three kingdoms of nature there is a perpetual exchange and circulation of the molecules of matter.

"From the stone which is formed in the bowels of the earth by the close combination of analogous and similar molecules which have come together; to the sun, that vast reservoir of inflamed particles which illuminates the firmament; from the torpid oyster, to man active and thinking, we see an unbroken progression, a perpetual chain of combinations and motions, resulting in beings different only in the variety of their elementary substances, and in the proportions of these same elements out of which arise their infinitely various modes of existence and of action" (p. 21).

• *Kant: Definition of Matter; An Expansive and Repellent Force.*

While Hume, denying the existence of anything outside of mind, found in the mind, that is to say, in the association of impressions brought about by habit and imagination, the origin of our belief in the reality of matter, Kant also seeks the principle of the formation of a world of objective phenomena in the mind, not, however, in its empirical habits and contingent impressions, but in its necessary and *a priori* laws. Not that Kant, like Hume, rejects the hypothesis of a world external to the mind; he only declares it to be inaccessible. In the construction of the external world, the mind supplies the form only, the material element comes to it from elsewhere, from the things-in-themselves.

• His theory of matter falls into three parts or stages: What is matter in itself, considered as a reality external to the mind? This is the metaphysical problem, and it is insoluble. How does the mind, with its forms, and its categories, arrive at the construction of an objective world set over against itself? This is the point of view of Criticism. The Transcendental Aesthetic and part of the Transcendental Logic are devoted to the solution of this second question. Thirdly, having assumed the existence of an external objective world formed by the combined action of the *a priori* laws of the mind which furnishes the formal element, and of that external reality which supplies the material element, what are we to understand by matter? To this purely scientific question

Kant replies in a work entitled: *Metaphysische Anfangsgründe der Naturwissenschaft* (Ed. Schubert & Rosenkranz, Vol. V). In a general way matter is a *something* which affects our senses, and as our senses can only be affected by motion, the first determination of matter is motion. Matter is, then, in the first place, that which is moveable in space, *das Bewegliche im Raume* (*Ibid.* p. 320).

Having thus defined matter, Kant considers the laws of the communication of motion: this is the object of the *Phoronomics*, thence he proceeds to what he calls *Dynamics*, and it is here that he completes his definition of matter. Considered no longer as a mere quantity, but as a quality, matter is the moveable which fills a space. To fill a space is to resist everything that could penetrate into that space, to oppose all motion coming from without by a contrary motion. As all resistance presupposes force of resistance, and all motion a motor force, matter can only fill space through a motor force (*durch eine besondere bewegende Kraft*, p. 343), which must consist in a sort of original elasticity and in a force of attraction and repulsion (*Zurückstossungskraft, Anziehungskraft*).

In virtue of this primordial force, matter is susceptible of indefinite compression and cannot be penetrated by another matter. By its repulsive force matter expands in space until it finds an obstacle in the resistance of another body. There is, therefore, no such thing as a vacuum, and matter is infinitely divisible. The repulsive force by itself would cause universal dissolution, and the attractive force by itself would reduce all the parts of matter to a mathematical point. The repulsive force only acts in contact, and the attractive force only at a distance.

Kant's philosophy of Nature is thus a dynamism: his chief objection to the atomistic and mechanical theory is the hypothesis of a void. In his *Mechanics* (the third part of the work mentioned above) Kant establishes the laws of motion, which correspond to the laws of thought laid down in the *Critique of Pure Reason*, or rather which are the same laws applied to matter.

Firstly: the Laws of conservation of matter and of motion—"In all the changes of natural bodies the total quantity of matter remains the same,

is neither increased nor diminished." Secondly: Law of inertia—"Every change in matter has an external cause." Thirdly: Law of the equality of action and reaction—"Whenever motion is communicated, action and reaction are equal." Fourthly: Law of continuity—"In no body can the state of rest or motion—nor in this latter state, the degree of rapidity or direction—be instantaneously modified by impact: this can only take place in a determined time, and through a continuous and infinite series of intermediate terms."

We must remember, however, that these laws are not the laws of an absolute reality, of a material substance existing outside the mind, but necessary and constant relations between phenomena in space and time which are the *a priori* forms of human sensibility. The mind, by means of its forms and its categories, and by means of a material element furnished by an unknowable reality, constructs a world of phenomena, an objective world, governed by the laws enumerated above.

5. *Fichte, Schelling, Hegel: What is Matter for the Idealists?*

Kant's successors, Fichte, Schelling, and Hegel suppress that unknowable reality external to the mind, which Kant had allowed to subsist. The Kantian dualism is thus resolved into an Idealistic Pantheism, in which the mind not only constructs the external world by imposing on it its form, as Kant had said, but creates and evolves it entirely out of its own activity.

Fichte rejects the existence of the *noumenon*, that thing-in-itself, whose relation to the mind it is impossible to explain. The things-in-themselves being abolished, there now remains as the principle of phenomena only the *Ego*. The mind furnishes not only the form, but the matter of knowledge. The *Ego* alone is, and it is all; but it can posit itself in consciousness only in opposition to the *Non-ego*. The world is reduced to the different decrees of the *Ego*, to the shocks which the *Ego* suffers, or rather gives itself in the development of its essence. The *Ego* presents itself as determined by the *Non-ego*, it must therefore attribute to itself only a partial reality, refer to the *Non-ego* all the reality which it does not attribute to itself, and admit a reciprocal action of the *Ego* and the *Non-ego*. It is because the *Ego* is determined, and appears to be passive, that we attribute reality and activity to the *Non-ego*. The *Non-ego* appears as the cause of this passivity in the *Ego*, and it is in this way that the category of causality is formed.

But how can a passive modification of the *Ego* be derived from the causality of the *Non-ego*, when the *Ego* is the principle of all activity, when the activity of the *Non-ego* and the passivity of the *Ego* are implied in the *Ego's* own activity? In order to solve this difficulty, Fichte assumes the existence in the *Ego* of an independent activity (*unabhängige Thätigkeit*), whose essence consists precisely in this limitation by the object of the infinite activity of the *Ego*. This activity is the *productive imagination* (*die produktive Einbildungskraft*), which by an unconscious action creates the object, or rather a representation of the object, and owing to the very fact that its action is unconscious, makes the object appear as a thing external to, and independent of us.

Schelling begins by developing Fichte's theory (*Ideen zu einer Philosophie der Natur*, 1797). He defines matter by starting from the nature of intuition, but soon abandons this Subjective Idealism, and for the *Ego* substitutes the Absolute, which is neither subject nor object, but comprises and precedes both terms. Philosophy must turn alternately from thought to Nature and from Nature to thought, in order to reproduce the life of the Absolute, which is the identity of subject and object, of Being and thought. Considered as objective, the Absolute is Nature, whose original identity with what is given to us as intelligence and consciousness is to be made every day more clear by speculative physics. The first manifestation of the Absolute in its objective form is matter. Here Schelling reproduces Kant's conception; matter comprises a positive force which resists all limitation by an infinite effort, namely, repulsive force; and a negative force which is opposed to the former, namely, attractive force. Repulsive force, which tends to infinity, when it is limited by the attractive gives us space filled and defined, or matter. The repulsive and attractive forces are reduced to weight, which, as the supreme principle of the reality of the forces involved in matter, is itself the Absolute. Thus Schelling's philosophy of Nature, like that of Kant, is a dynamism, but a dynamism endowed with intelligence and reason to a fantastical degree.

The Absolute for Hegel is the Idea, and the universe is merely the dialectical evolution of the Idea. Take away from an object its rational element and nothing remains; therefore

this rational element is what constitutes true reality. Nature is the Idea becoming external, other than itself (*die Idee in der Form des Anderseins*). The Idea, in so far as it is sundered, negates itself, sets itself in opposition to itself, and becomes *other* or an external object. For the very reason that it finds in nature only an imperfect and inadequate expression, the Idea tends to recover itself, to return to itself. Thus it is that nature, with all her potentialities, throughout all her transformations tends towards Spirit, a higher form of the Idea, in which it becomes conscious of itself. Nature is then a system of moments which proceed necessarily one from the other, and each of which is the truth of the one from which it results. The starting-point of this evolution is the sundered existence which has the principle of its form and its unity outside itself; in other words, it is the material and mechanical world.

To deduce matter *a priori*, to make it depend on the logical movement of the Idea, was no easy task, and, indeed, Hegel's abstractions become at this point somewhat unintelligible. Space is ideal contiguity; it is pure and abstract externality. Time is ideal succession, pure becoming. Time and Space are the most abstract categories of nature; with them Hegel constructs according to the process of his dialectic, place, motion, and finally matter, which is their immediate unity. Matter comprises a repulsive and an attractive force; the identity of repulsion and attraction constitutes weight, in which the notion of material substance is completed and realized.

Materialism in Germany: Feuerbach, Büchner, and Moleschott.

The great Idealistic systems of Fichte, Schelling, and Hegel were followed in Germany by a materialistic reaction, the causes of which are to be found chiefly in the progress of the natural sciences and of commerce. A small portion of the Hegelian school itself inclined, if not towards Materialism, at least towards a Sensationalism which would inevitably lead to it. The principal representative of this tendency is Ludwig Feuerbach. "Truth, reality, the world of sense are identical. The sensible thing alone is true, real; the world of sense alone is truth, reality. Body forms part of my being, nay more, my whole body is my self, my very being" (*Grundsätze der*

Philosophie der Zukunft, 1849). Feuerbach, however, deduces from these principles a sensationalism which was idealistic rather than materialistic.

Two philosophers in particular have contributed to this revival of Materialism—*Moleschott* and *Büchner*. Moleschott, in his *Kreislauf des Lebens* (1852), sets out, like Feuerbach, from sensationalism, whence he deduces a materialistic theory. Matter is inseparably united to force. Both are eternal, and there is a perpetual exchange or circulation of force and matter. He waxes poetic when he considers the metamorphoses of this indestructible and ever-moving substance:

"The exchange of the forms of matter is an everlasting force, "an ever-flowing fountain of youth. . . . What is there ignoble in a theory which makes us regard every repast as a sacrament (*Abendmahl*), in which we convert unthinking matter into thinking beings, in which we truly partake of the flesh and blood of the Spirit, and thus through our children's children diffuse spirit into every part of the world and throughout every age?" (*Kreislauf des Lebens*, pp. 437, 439).

Büchner (*Force and Matter*, 1855) also makes empiricism his starting point. Experience alone can lead us to truth; experience excludes all supersensible knowledge, and through it we apprehend relations only, things existing only in their relation to one another. Force and matter are inseparable; both are eternal. Thought, however, is inclined to separate them, and even to regard them as opposed to each other.

We are unable to define mind and force otherwise than as immaterial, as excluding matter, or as antithetical to it. "The words, mind, spirit, thought, sensibility, volition, life, designate no entities and nothing real, but only properties, capacities, actions of the living substance, or results of entities which are based upon the material form of existence. He compares this result to that of a steam-engine, the force of which is invisible, inodorous, and intangible, while the steam it emits is a secondary thing, and has nothing to do with the 'be-all and end-all of the machine.'" (*Lange's Hist. of Materialism* II, 115).

As we see, Büchner's theory provides no distinct definition of either matter or force. The ancient materialists were more consistent and more intelligible when they reduced all force to motion, to the pressure and impact of matter.

As was to be expected in the country that had given birth to Kant, many German thinkers protested against Materialism

on the ground of the nature and limits of our knowledge. Dubois-Reymond (*Limits of our Knowledge of Nature*) maintains that the materialistic theory which is so convenient for the explanation of phenomena is far from being an ultimate explanation of things. In reality, what we possess as regards nature is not knowledge but a show of explanation or a substitute for knowledge. Materialism has to confront two insoluble difficulties. (1) We are unable to understand the atoms; we cannot represent to ourselves a thing entirely without sensible qualities, while at the same time all our knowledge tends to convert these qualities into mathematical relations. (2) We cannot explain any single one of the phenomena of consciousness by means of atoms and motion.

Lange (*History of Materialism*), adopting the point of view of Critical Idealism, admits that Materialism is an excellent formula for the study of nature, and in fact the only true and scientific form an explanation of natural phenomena can take; but to imagine that it is an ultimate and definitive solution of the metaphysical problem is a naïve illusion, arising out of that other illusion which consists in taking the phenomenal world of space and time as the type of true reality. The study of the objective world as governed by the laws of determinism is not the sole function of thought: it has another and higher task to perform. Owing to its power of poetic creation, the mind is able to conceive the existence, alongside of the objective world, of an ideal world, more beautiful, more harmonious, better adapted than the other to its true needs, to its secret tendencies—a world in which it enjoys full independence and a complete autonomy.

CHAPTER III

MIND

THOSE philosophers who deny the existence of matter yet find themselves obliged to give some explanation of the phenomenon which awakens the idea of matter in the human mind; even the most uncompromising Idealists have had to assume a principle of limitation and of passivity: thus the problem of matter forces itself upon every system of philosophy, including those which deny that there is any such thing as matter. And the case is the same with the problem of mind. An explanation must be found for the activity and relative order which seem to be the conditions of existence in the world, and for the will and self-conscious intelligence found in man. In this wide sense, the problem of mind has had to be faced by every school and every system, for it enters as a necessary element into every philosophy of nature and of thought.

Progressive Distinction between the Corporeal and ~~Spiritual~~, from Thales to Socrates.

The distinction between soul and body was, with primitive man, the result of the experience of death: a man was alive, he dies, and his body, which has still the same appearance, has lost all power of motion and feeling. The idea of the soul contained at first no elements except those which could be directly deduced from this experience (Zeller, *Pre-Socratic Philosophy*, Eng. tr. I, p. 124). The soul was like a breath of air, it was a subtle body, sometimes conceived in the likeness of the phantoms seen in dreams. For Homer, however, the

soul is a kind of image in the form of the body, and it escapes at the moment of death through the mouth or through an open wound. When separated from the physical organism it is only a shade (εἶδωλον) without strength, or consciousness, or recollection (*Odys.* X, 490 sq.; XI, 34, 151, 215, etc.). The world is conceived on the analogy of man, and all nature is supposed to be full of souls like that which man believes he possesses himself.

We recognize the influence of these primitive conceptions in the first period of philosophy. The distinction between soul and body was not as yet a distinction between material and spiritual elements. The old Ionic philosophers sought the first principles of things in a living matter which was transformed in a progressive evolution (Doctrine of Hylpoism). Whether this matter be water, air, or fire, or an indeterminate Infinite (as with Anaximander), it is always identified with the force that moves and animates it. When, with the progress of reflection, a place was given amongst the principles of nature, not only to force, but to intelligence, reason was conceived as merely another attribute of the primary matter (e.g. the "thinking air" of Diogenes of Apollonia).

The fire of Heraclitus is a Reason which mingles with everything, and which out of the strife of contraries brings forth harmony. The human soul is made of warm and dry vapours. The purer the fire, the more perfect the soul. "The soul that is the most dry is the best and most pure" (*Frag.* 54). "If the drunken man cannot contain himself, it is because his soul is soiled by moisture" (*Frag.* 53). The soul, like everything else, is subject to the law of change, and must therefore nourish itself with the external fire in order not to be exhausted. Reason, which is identical with fire, enters into our bodies through the organs of sensation, and through respiration. When the organs of sense close in sleep, the flame of reason darkens; when they open again on our awakening, it lights up once more. But it is extinguished for ever when man loses connection through respiration with the external world.

Parmenides, who taught the absolute unity of Being, and denied all becoming, did not need any principle to explain the apparent motion and order in things. For him the multiplicity of souls is only an illusion. His philosophy of nature is a concession to the demands of common sense; that

is to say, it rests upon what seems to him to be the most plausible theory. Far from setting up any antithesis between the spiritual and the corporeal, he explains all psychological phenomena by the mixture of substances in the body.

The Pythagoreans thought they had found an adequate explanation of the cosmic order when they made Number the substance of things. Harmony was placed above Number, as a kind of soul of the world, governing the cosmos; if there was harmony in the universe, it was because the essential constituent of things, namely, Number, was itself harmony. How did the first Pythagoreans conceive the human soul? Aristotle, in his review of the opinions of his predecessors concerning the soul, merely says of the Pythagoreans that "some among them sought the soul in particles that are in motion: τὴν ψυχὴν εἶναι τὰ ἐν τῷ ἀέρι ξύσματα, οἱ δὲ τὸ ταῦτα κινεῖν" (*De Anima*, I, 2, 404 a, 16). To the Pythagoreans the opinion is also attributed that the soul is a harmony. But as everything with them was number and harmony, this does not imply any distinction between human souls and other things. Did they regard the soul as the harmony of the body, as we are told in the *Phaedo*? It is difficult to reconcile this opinion with the doctrine of the immortality and transmigration of souls taught by the Pythagoreans.

In Democritus we find a frankly materialistic theory of the soul. Motion being eternal, there is no need to distinguish matter from the force that moves it. The soul is corporeal, and its substance must correspond to its functions. Now, the soul is a vivifying and moving force. But all motion arises out of an impact; therefore the soul must be composed of the most mobile substance, of atoms that are subtile, smooth, and round; in other words, of fire (*Arist. De Anima*, I, 2, 403 b, 29). The universe is full of fiery atoms. The soul is therefore not a force that organizes the world, but a part of matter, and it is formed out of the multitude of fiery atoms which engender motion and life. In man the soul pervades the whole body; between every two corporeal atoms a psychical atom is inserted (*Lucr. III*, 370). It might be supposed that the fiery atoms would be driven out of the body by the surrounding air, but this danger is averted by respiration which introduces new fiery elements, and above all forms an

opposite current, which prevents the psychical atoms in the body from escaping.

Heraclitus' theory of the soul, the substitution in the Eleatic and Pythagorean systems of an abstract principle for a material element, the general progress of Greek thought, all helped to prepare the way for the distinction between the material and the spiritual. Anaxagoras was the first of the Greek philosophers to formulate clearly this distinction, and, for this, Aristotle greatly honours him: "he was like a sober man amongst men who spoke at random": *οἷον νήφων ἐφάνη παρ' εἰκῇ λέγοντας* (*Meta.* I, 3, 984 b, 16). In the beginning, all the elementary substances are mixed up together. The distinction and combination of like particles are the work of an organizing and motor force, namely, *Noûs*, intelligence: *πάντα ἦν ὁμῶς, ὁ Noûs ἐλθὼν πάντα διεκόσμησε*.

Anaxagoras distinctly separates matter from the force by which it is moved and governed; but the attributes by which he characterizes intelligence, show that his notion of it was not yet very clear.

The *Noûs* is simple, and not like all other things, composed of heterogeneous elements. Mixing with nothing it exists alone and of itself, "*μόνως αὐτὸς ἐφ' ἑωυτοῦ ἐστίν*" (*Frag.* 8). It is infinite (*ἄπειρον*), independent (*αὐτοκρατές*), never passive (*ἄπαθες*), it has unlimited knowledge, "knows what is mixed, what is distinct, and what is separate" (*Simpl. De Cael.* 271 a, 20). Lastly, it has absolute power over matter, to which it alone can communicate motion: "*γνώμην περὶ παντὸς πᾶσαν ἰσχει καὶ ἰσχύει μέγιστον*" (*Frag.* 8).

Such is the spiritual element in the conception which Anaxagoras formed of the *Noûs*. But, on the other hand, his *Noûs* is described as the most subtle of all things: *λεπτότατον* (*Frag.* 8); its quality does not change, but its quantity varies. The souls of other beings are parts of it; and these parts may be either greater or smaller. "In everything there are parts of everything except perhaps of intelligence, but in some beings there is also intelligence" (*Frag.* 7). The *Noûs* was thus a kind of world-soul, an intermediate substance, which was akin to the spiritual in so far as it was simple, independent, and intelligent, and to what is corporeal, in so far as it possessed quantity, and perhaps also extension.

Socrates himself tells us (*Phaedo*, 97 b) that he was delighted with the theory of Anaxagoras; but he would seem to have merely enlarged the province of an intelligence that loved the good. His God is a kind of world-soul (ἡ ἐν τῷ παντὶ φρόνησις), a wisdom which pervaded all things. The soul of man is only a small part of the universal intelligence, just as his body only contains a very small portion of the material elements (*Mem.* I, 4). This soul, although invisible, exists and is the sovereign ruler of the body (βασιλεύει ἐν ἡμῖν), and, as reason, it, more than anything else in man, participates in the divine.

Plato: the Soul of the World and Individual Souls.

It is not easy to disengage Plato's theory of the soul from the symbolic form in which he clothes it. The world is an animated, living whole, which has a body and a soul. The soul of the world, fashioned directly by the *demiurgus*, in proportions that are mathematical and musical (*Timæus*, 35 b sq.), is a middle term between the intelligible and the sensible. God puts intelligence into the soul and the soul into the body (*Tim.* 30 b). To fulfil its rôle of medium, the soul must possess something of each of the two opposite natures which are reconciled in it. In the soul are blended the one and the many (*Tim.* 35 a). What moves itself must exist before that which is moved by something else. The soul possesses in itself the principle of its own movement. It moves the body according to numerical and harmonical relations: it makes the world into a wise mixture of the Limit and the Unlimited (πέρας, ἄπειρον). This soul, this principle of harmony, is a reality (οὐσία), a substance extended throughout the world by the *demiurgus* and divided according to harmonical relations which correspond to the laws followed by the motion of the stars (*Tim.* 34 b sq.). The soul is not only the principle of the visible order in things, it is also the principle of all knowledge; and this is another reason why it combines in its nature the same (ταυτόν) and the other (τὸ ἕτερον), the intelligible and the sensible; for in Plato's theory like can only be known by like (*Tim.* 37 a). This account of the soul is evidently partly symbolical, and not meant to be taken literally. According to Aristotle, it is τὰ μαθηματικά, the

mathematical elements, that are the middle term between the sensible and the intelligible, and they perform the same function as the world-soul in the *Timæus* (*Met.* I, 6; 987 a, 14). The mathematical forms are eternal, not subject to becoming, and are distinguished from the Idea in that each Idea is one, whereas there are several similar mathematical forms. Since matter, as such, is Non-being, we may say that what is real in the world-soul, as in the mathematical forms, is the Idea, and that, consequently, the Idea is the ultimate principle of order and motion in the world of bodies (see Zeller, II, I, p. 568, Germ. ed.).

The individual souls appear to be parts of the world-soul, as the elements of the body were parts of the universe (*Philebus*, 30 a). The stars are the highest among the beings that have an individual soul, and next to them are men. The soul cannot be regarded as a collective unity, as the harmony of the body (*Phædo*, 92 b sq.); it is incorporeal, simple, invisible, and existed before the body which it governs. τῷ μὲν θεῷ καὶ ἀθανάτῳ καὶ νοητῷ καὶ μονοειδεῖ καὶ ἀδιάλυτῳ καὶ αἰεὶ ὡσαύτως καὶ κατὰ ταῦτ' ἔχοντι ἐαυτῇ ὁμοιότατον εἶναι ψυχὴν (*Phædo*, 80 b).

There are three parts in the soul; the first, the *νοῦς*, is divine; the second, which is fleeting and mortal, is desire, *ἐπιθυμία*; the third, whose function it is to unite these two extremes, is the *θυμός*, which has something of the nature of each of the two others. These three parts of the soul correspond to the three classes of living beings. To the *ἐπιθυμία* correspond plants; to the *θυμός*, animals; to the *νοῦς*, men.

Aristotle: the Soul, the Formal, Efficient, and Final Cause of the Body.

Aristotle finds no unity in the world except that which results from a universal tendency towards the same perfection, that is, towards God; in his system, therefore, a world-soul is not required.* In the sphere of change every being is the product of the union of matter and form: οὐσία σύνολον ἐξ ὕλης καὶ εἶδους (*Metā.* VIII, 2). Matter is the substratum (*ὑποκείμενον*), which becomes this or the other, or is the subject of change. The form (*εἶδος*, *μορφή*) is that which makes of matter a particular, determinate, or real thing; it is the per-

fection, the activity, the soul of the thing. Since everything that becomes has its formal cause, which is its principle (*ὄθεν ἡ ἀρχὴ τῆς κινήσεως*) and its end (*τέλος, τὸ οὐ ἕνεκα*), one may say that there is in every being a principle analogous to the soul. The soul is in the proper sense of the word the first entelechy¹ (*ἐντελέχεια πρώτη*) of an organized body potentially possessing life (*De An.* II, 1; 412 a, 15); the entelechy of the eye is the action of looking at something at a given moment, (*ὄρασις*). Suppose the eye were by itself a complete living thing, its soul would be *ὄψις*, the faculty of vision. The *ὄψις* is the essence, the form of the eye. The soul is to the body what the *ὄψις*, vision, is to the eye, and in this sense it has something of the body (*τι σώματος*); but this something is neither figure nor motion, but the peculiar activity which gives to the body figure and motion, the cause of the agreement and harmony between all its parts (*De An.* II, 4; 415 b, 7). In a living being the body is the material cause; the soul stands to it in the relation of its entelechy, of its formal, efficient, and final cause. The soul is the end of the body, an end which is real, immanent, and not a mere regulative idea external to its functions. This end is the immovable cause of all the movements directed towards itself; therefore, we must not say with Plato, that the soul moves itself, for it moves as a sailor moves on his ship (*De An.* 404 a).

The soul, being the end of the body, cannot be a material, indeterminate thing; it must be a finished, defined being, not merely any substance in general, but the form of a special body, whose life, individuality, and organization it constitutes (*De An.* 414 a, 21). The soul, the final and formal cause of the body, is also its efficient cause, since it gives rise to, and directs all its movements and is the real, the first entelechy, which realizes throughout the body all the conditions of life. The soul is therefore, with regard to its divisible and material body, the indivisible unity of the three causes,

¹ The first entelechy is to the second what science is to actual thought. The geometer is not always occupied with geometry. If the eye were a living thing, vision would be the soul of the eye. The faculty of seeing (first entelechy) can be distinguished from the act itself of seeing any particular object (second entelechy). The eye is always adapted for vision, even when it is covered.

the efficient, formal, and final. The two terms presuppose or imply one another. The soul is not in the body as in a dwelling, which it may abandon; it cannot travel from body to body, being able to exist only in the body that corresponds to its essence, and which by this very fact it creates (*De An.* 407 b, 13).

There are three kinds of souls corresponding to the three forms of life found in Nature: these are the vegetable, the animal, and the human soul. The soul of plants is τὸ θρεπτικόν, nutritive, (*De An.* 413 b, 7), and its functions are nutrition and generation. The soul of the animal is αἰσθητικὴ, sensitive (*De An.* 413 b, 1); sensation gives rise to desire, and desire to motion. The human soul is characterized by reason. The vegetable soul has a special, independent existence in the plant, and in the animal it blends with the sensitive soul: the rational soul in its higher life comprises and unifies the two inferior souls and their functions.

After Aristotle the notion of the Spiritual disappears. The Epicureans: Elements of the Soul. The Stoics: the πνεῦμα.

After Plato and Aristotle the conception of the spiritual became very obscure. The Epicureans returned to Atomism and to the conception of a material soul. Nothing was incorporeal except the void, which was neither active nor passive. The soul was composed of very subtle elements; and they gave two proofs of this subtlety: in the first place, the promptitude with which the will moves the body; in the second place, the fact that a man when dead weighs as much as when alive (Lucretius, III, 178, 231 *et seq.*). What were the elements of the Epicurean soul? Lucretius distinguishes in it a light breath (*aura*), heat, (*calor*), and air (*aer*). To these three elements is added a fourth, *omnino nominis expertus* (III, 243), which is the most subtile of all, and is composed of the smallest and smoothest atoms. It is this fourth element that communicates motion and sensibility, first to the *aura*, the *calor*, and the *aer*, then to the blood, then to the viscera, and finally to the bones and muscles. These four elements, closely united, mixed, and, as it were, fused together, are present in every part of the body. Thought corresponds to the most subtile of them; and to each of the others there corresponds a special quality: Heat is the principle of

courage; the *aura*, of fear; the air, of calmness and indifference. Heat predominates in the lion, *aura* in the stag, *aer* in the ox. In man all three kinds of temperament are found.

The Stoics also, on their part, said that all that is real is corporeal, but they endowed matter with attributes which belong properly only to a spiritual substance. The ideas of the spiritual and the corporeal, which since Plato and Aristotle had seemed to be clearly distinguished, were now once more confounded. The world, on the Stoic system, is a living thing, an immense animal; matter is its body, force its soul. But this force is not incorporeal; it is a subtle fire, a principle homogeneous and co-extensive with its effects; it pervades matter in a material way, gives it form and embraces and contains it. This corporeal soul, this burning and thinking breath (*πνεῦμα*), this organizing fire is God Himself (*Stob. Ecl.* I, 56). "God flows through the world like honey in the honeycomb" (*Tertull. De An.* 44). His supreme intelligence manifests itself in the order of the world and in human thought. God, a material soul infused into the vast body, which it animates and in which it moves, is the seminal reason (*λόγος σπερματικός*) of the universe (*D.L.* VII, 136). All activity can be reduced to motion in space, therefore all activity is physical, and hence necessary. The soul of the world is at once Fate and Providence.

The human soul is a fragment of God, ἀπόσπασμα τοῦ Θεοῦ (*Epict. Diss.* I, 14, 6), a part of the divine breath immersed in the human body (*in corpus humanum pars divini spiritus mersa*) (*Sen. Ep.* LXVI, 11). The soul, says Chrysippus (*ap. Galen, Hippoc. and Plat.* III, 1), is an innate breath in us which pervades the whole body and contains it. ἡ ψυχὴ πνεῦμά ἐστι σύμφυτον ἡμῖν συνεχές παντὶ τῷ σώματι διήκον. This πνεῦμα is composed of air and fire (*ex aere et igne*). The soul is thus a material principle of the nature of air, and of fire. The Stoics proved the materiality of the soul directly, by its sympathy with the body, by its presence throughout the organism, and lastly, by the moral resemblance between children and their parents. The soul supports the elements of the body (*ἐξῆς*), presides over its development (*φύσις*), and is the principle of intellectual life (*ψυχὴ*). This hierarchy of functions does not affect the unity of the soul, which is always one and the same divine

fire, fulfilling divers functions in the different material substances. The soul proper comprises eight parts: the ἡγεμονικόν or ruling part, the five senses, the faculty of speech and the faculty of reproduction.

The Soul and the πνεῦμα. Influence of Hebrew Theology; Philo; the New Testament.

The theory of the πνεῦμα is not peculiar to Stoicism; on the contrary, it played a most important part in physiology, and dominated the whole of medical psychology, till the date of the discovery of the circulation of the blood. The πνεῦμα in a material sense was sometimes regarded as the soul itself, sometimes as the chief organ of the soul, the medium between mind and body. For primitive man the soul was a breath, a subtle air. According to Diogenes of Apollonia, thought is born of the air which flows with the blood through the veins all over the body. Respiration, says Heraclitus, nourishes the soul with the surrounding air, without which there is neither life nor reason. In the physiological explanation offered by Hippocrates, the air, inhaled and mixed with the internal heat, plays the part of a dynamic principle. Most of the physicians, even while belonging to different philosophical schools, regarded the πνεῦμα not only as the vital force which organizes and sustains the body, but as the soul itself. The illustrious Galen, who gave a definite form to the physiological and medical theory of the πνεῦμα, was not decided as to whether it is the soul itself or the chief organ of the soul.

• For the Stoics, the πνεῦμα was corporeal, but had nevertheless all the attributes of the mind. This involved a contradiction, in consequence of which the theory of the πνεῦμα gradually came to resemble the Platonic theory of an immaterial soul. This transformation was chiefly due to contact with Hebrew theology. The Hebrew expression which corresponds to the Greek word πνεῦμα (Ruch) had at the beginning a material meaning. It was the air, the wind—in living beings respiration, the vital breath which circulated with the blood. But the Biblical conception of God led to a spiritualizing of the πνεῦμα. Jehovah is distinguished from His work; He creates the world by an act of His will. The πνεῦμα could not therefore be, as with the Greeks, a material element which

acted upon matter in a mechanical way. It was a principle distinct from the body, like the principle of force and life. Still the Old Testament always speaks of the *πνεῦμα* as of a semi-physical force: *e.g.* God's spirit leaves Him and is diffused like a breath. In the Book of Wisdom which is attributed to Solomon, but appears to have been written about the time of Augustus, wisdom, that is God's power, which fills the world, is a *πνεῦμα*, a breath which fuses together the attributes of matter and mind (*πολυμερές—λεπτόν—ὀξύ—διὰ πάντων χωροῦν πνευμάτων*, all of these being characteristics which remind us of the Stoic Materialism).

Philo was the most renowned of the Alexandrian Jews who endeavoured to reconcile Judaism with Hellenism. With him the theory of the *πνεῦμα* takes a decidedly spiritual form, although in his writings we find more than one contradiction, in which we discern the influence of the Stoics and of the Greek physicians. Jehovah, the unknowable God, cannot act directly on matter; it is therefore through intermediaries that He governs the world. All those divine forces, all those powers by which the world is bound to God, are comprised in Wisdom or the Word. Philo's *Λόγος* is a more or less coherent synthesis of the Hebrew Wisdom, the Aristotelian *Νοῦς* and the Platonic world of ideas. The divine *πνεῦμα* is nothing but a form of the activity of the Word: it is the Word in so far as the latter not only represents the Ideas, the eternal exemplars in God's mind, but in so far as it realizes them in the world. Like the *πνεῦμα* itself, the *Λόγος* is spiritual, and yet Philo adopts the Stoic materialistic definition of quality: *ἕξις πνεύμα ἀντιστρέφον ἐφ' ἐαυτό.*

Philo's psychology presents the same spiritual character and the same contradictions. Space is full of souls. The pure souls which have not been tempted by the false seductions of the sensible life, are the messengers of God, the demi-gods, the Greek heroes, the angels of Moses. Taken by itself and as distinct from the sensible elements which result from its union with the body, the soul is a divine force. Man is united to God by his spiritual nature, is His image, and even a part of Him (*ἀπόσπασμα*). The vegetable and sensitive soul is made up of the aeriform elements of the seed; reason comes from without, is the breath of God in man. As

a mere vital force the soul has its seat in the blood; but the πνεῦμα, in which alone the essence of man consists, is the Divine breath: τοῦ λογικοῦ τὸ θεῖον πνεῦμα οὐσία—νοῦς ἀπ' οὐρανοῦ καταπνευσθεὶς ἄνωθεν. Philo, however, is not always consistent, for he makes air the universal principle of life and of the soul; and he even says of the rational soul that it emanates from that Ether of which heaven and the stars are formed.

In the New Testament the πνεῦμα assumes an entirely spiritual signification. Traces of the analogy between the material air and the πνεῦμα are only to be found in such similes as "I saw the spirit descending from heaven like a dove" (*John*, I, 32): "The wind bloweth where it listeth" (*John* III, 8). But the Revealer, the Witness, the living Eternal Principle of knowledge and belief for the faithful is the immaterial, Divine Spirit (see *John* XIV, 16, 26). This mystical meaning of the term πνεῦμα is most striking in the writings of Paul. With him there is no question of its being any longer a physiological, organic force; it is an entirely spiritual force. The Spirit gives us faith, the knowledge of divine things; by it we enter into communion with God. "But he that is joined unto the Lord is one spirit, ἐν πνεύματι" (1 *Cor.* VI, 17). The πνεῦμα is no longer a vital force that organizes the living body, but the principle of an entirely new life, which is a dying to the life of sin and to the works of the flesh.

• *Neo-Platonism: The notion of the Spiritual re-appears in the Theories of the World-soul and of the Soul of Man.*

In the Neo-Platonic system Metaphysics were once more based on the notion of the spiritual.

"That which is incorporeal, according to Ammonius Saccas, the teacher of Plotinus, is of such a nature that it unites itself to everything that is capable of receiving it, as closely as those things which mutually alter and destroy each other by being united, and at the same time it remains in this union, entirely as it was before, as things remain which are only in juxtaposition" (Ravaisson, *Essai sur la Métaph. d'Arist.* II, 374-5).

This possibility of self-bestowal without loss, of being divided without ceasing to be one, is in fact the principle of

the theory of Emanation. From the Absolute Unity, as it were by radiation, the *Noûs*, which is both intelligence and the intelligible, proceeds, and from the *Noûs* proceeds the universal soul. The soul of the world is the God of the Stoics, the principle of unity in the cosmos which it pervades and contains. Between the world of intelligible entities and the world as it appears to us, it evolves a multitude of distinct powers out of the forms which the intelligence comprises in its own unity. In this evolution the world-soul, proceeding from one thing to another, creates time and extension, which are the conditions necessary to the fulfilment of its task. Thus it is from the soul that all that is real in matter proceeds.

This universal soul embraces a multitude of individual souls; these, being desirous of making for themselves an independent existence in some separate body, enamoured of their own image, separate themselves from the soul, which is their common principle, and fall into the body. Not that the individual souls are merely parts into which the universal soul is divided: the universal soul is whole and entire in each one of the particular souls, is everywhere present without division: *μενούσης μὲν ὅλης, ποιούσης δὲ παρ' αὐτῆς οὐδὲν ἡττον πολλὰς* (*Enn.* IV, ix, 4). It gives and yet preserves itself, is multiplied and yet remains one. This soul, ever similar to itself, which penetrates and brings harmony into all the parts of the world, as into the organs of our body, cannot be a material thing. In the first place, what is extended and divisible is unable to impart unity to anything, it must itself receive unity from some spiritual principle, so that a material soul would require another soul, and so on *ad infinitum*. In the second place, if the soul is composed of parts, how are we to explain the sympathy and harmony between its actions, how are we to account for the unity of perception, of comparison, and of memory?

Not only is the human soul closely united to the universal soul, but it is not separated from the *Noûs* in which it is represented, nor from the One from which it emanates like everything else. Its task is to rise gradually once more into the world of intelligibles, to return through ecstasy to its true home, which is the Absolute Unity, the Supreme Good.

Different Views concerning the Nature of the Soul held by the Earlier Christian Philosophers.

The immortality of the soul would seem to follow as a consequence from its spirituality: if the soul is indivisible it is indissoluble. The spirituality of the soul as a condition of its survival must, one might think, necessarily be a dogma of Christianity; nevertheless, among early Christian philosophers there was some hesitation on this point. The apologist Tertullian (born A.D. 160) was a materialist after the manner of the Stoics; he denied the existence of anything immaterial, asserting that the soul and even God were corporeal; *Omne quod est, corpus est sui generis: nihil est incorporeale nisi quod non est* (*De An.* 7). He adopted the theory of the *πνεῦμα*; the soul is subtle, luminous, ethereal, a breath animating the body, penetrating all its elements; it is extended, and those who are in a state of ecstasy can see it with their eyes as it sees itself.

In opposition to Tertullian, Gregory of Nyssa (331-394) rejects all the definitions of the soul except that of Plato. Aristotle's definition he disputes, saying that a body that potentially possesses life before it is alive is inconceivable. The soul is an *οὐσία αὐτοτελής*, a self-sufficient substance, which is always in motion, and to which rest would be annihilation. It fills the body, not materially, but dynamically, as light penetrates the air. It is not, properly speaking, in the body, the body is in it (*De Opif. Hom.* 11).

In the middle of the fourth century, Hilary, Bishop of Poitiers, revived the doctrine of the materiality of the soul. He maintained that every created thing, even the human soul, is material, that God alone is outside the categories of space and time. This doctrine was refuted by Claudianus Mamertus, Bishop of Vienne in Dauphiné (died 477); he proves, that in order to distinguish the soul from God, it is not necessary to assume its materiality. The soul does not come under the categories of space and quantity; and in this it resembles God; but it is created and moves in time, and in this it resembles the body, and is something distinct from God Who is eternal and uncreated. The soul is, therefore, spiritual; as Gregory of Nyssa had said, it is not contained in the body; it is the soul that contains the body, for it is the soul

that constitutes and preserves the unity of the body (*De Statu Animae*).

The Christian doctrine of the soul was established once for all by St. Augustine, who also advanced arguments which were to be repeated by most of his successors. The soul is spiritual, because it is the subject of thought (*De Trin.* X, 10, 15). It is impossible to regard thought as an attribute of that which does not think. The soul perceives directly in itself only spiritual functions, such as thought, knowledge, volition, recollection (*De Trin.* X, 13). If it were corporeal it would perceive immediately in itself something corporeal (*De Quant. An.* 17, 30). The soul is finally characterized and distinguished by the faculty of reflection. A body has only one figure, one form; it cannot become the figure and the form of another body; the mind can know and love both itself and all other things (*De Trin.* IX, 4). In a word, the soul is conscious of itself as an unextended substance whose activities bear no relation to the properties of matter.

The Middle Ages and the Renaissance.

The Middle Ages produced no new method and no new solutions, but the doctrines of Plato and of Aristotle prevailed alternately: and it did not occur to the philosophers of this period to make a study of reality and observe facts. Some among them returned to the hypothesis of a world-soul, which would appear to have been somewhat superfluous in any system that held the creation of the universe by a God Who was also its Providence. *Bene Plato Spiritum Sanctum animam mundi quasi vitam universitatis posuit*, says Abelard (*Theol. Chr.* I, 1013). Bernard of Chartres and William of Conches (during the first half of the twelfth century), who were both fervent Platonists, also adopted the theory of a world-soul. Bernard of Chartres indeed finally arrived at a kind of Pantheism: *mundus quidem est animal, verum sine anima substantiam non invenias animalis* (*Megacosmos*). Above all things, he said, there is God, the Ineffable One; the *Noûs* is the mind of God, wherein dwell the eternal ideas, the archetypes of all that exists. From the *Noûs* flows the world-soul, as it were, by emanation (*velut emanatione deflurit*), which gives to the world its form and its

unity (*naturam informavit*). The *Nous* is the Word; the soul of the world is the Holy Ghost (*Oeuvres inéd. d'Abelard, De Mundi Universit.* See Y. Cousin, Vol. I, p. 628 *et seq.*).

When the works of Aristotle had become known in the West through the medium of the Arabs and the Jews, Scholastic philosophy became Peripatetic—about the beginning of XIIIth century. The writings of William of Auvergne (died 1249) mark this transition. In his treatise, called *De Anima*, which, considering its period was a remarkable work, and which was written under the inspiration of St. Augustine, he foreshadows the *cogito ergo sum* of Descartes. It is contradictory to deny the existence of the soul, he says, for he who denies the soul knows that even while he denies, he thinks, and that if there is thought there must be a thinking being. Moreover, we have an immediate perception of our soul *per dispositiones intelligibiles, quae sunt scientiae, dubitationes et omnino cogitationes*. On the other hand, we know the souls of others only through their bodies, that is, through signs or symbols. How, is it then, that some men deny the existence of the soul? It is because they are accustomed to think under the condition of space, of figure, *sequi signa sensibilia ad excogitandas vel potius ad imaginandas res*. But let us imagine a man suspended in the air, and so muffled up that he can use none of his senses, this man will think, therefore he thinks himself (*cogitat et intelligit ergo ac cogitat et intelligit*). He negates his body, he affirms that which he has and which he feels (*sentit*) himself to have, and this implies the existence of a soul which is distinct from the body.

Albertus Magnus and Thomas Aquinas adopted the doctrines of Aristotle, and made them harmonize with Christian dogma. According to St. Thomas, the embryo, from the beginning of its life, possesses an individual soul which is, however, only a vegetable soul (*Summa Th. I, qu. 118, a. 2*). This soul disappears to make room for another, which is at once vegetable and sensitive; finally, the latter, in its turn, yields its place to an intellectual soul which comprises within itself the two other faculties: and it is not till then that the animal becomes man. The human soul is thus a form without matter (*forma separata*), and the entelechy of the body. The organizing principle of the body, of the motor and sensitive soul, and

finally of the rational soul, is one and the same substance. The vegetable and sensitive souls are present in the embryo before the appearance of the rational soul. The latter is created immediately (*Sum. Cont. Gent.* II, 86, 1), comes from without, and is so closely fused with the two others that they are entirely absorbed in it. This complicated doctrine was adopted by the Council of Vienne, A.D. 1311.

The Renaissance prepared the way for modern philosophy. Platonists, such as Ficino, and Aristotelians, such as Casalpini, all agreed in regarding extension as the essential attribute of matter, and thought as the essential attribute of mind. Matter was now no longer, as with Aristotle, an indeterminate potentiality; it had a positive attribute, namely, extension. Thus the historical continuity was not broken, for this theory of the philosophers of the Renaissance brings us by a natural transition to the doctrines of Descartes (see Ritter, *Hist. of Philos.* Part IX; *Chr. Philos.* Vol. II; *Geschichte der Psychologie*, by F. Harms, p. 225).

We must mention, however, the influence exercised by Averroës in the school of Padua, and the disputes between the Averroists and the followers of Alexander of Aphrodisias. The Averroists held that the active intellect was impersonal, the same in all men; but that, for this very reason, it was immortal, and after the death of the individual returned to God. Pomponatius, in his *De Immortalitate Animæ*, attacks the doctrine of the unity of souls, and after a lengthy examination of the arguments of philosophers concludes that the soul is mortal. Owing, however, to the distinction which was then current between matters of faith and matters of philosophy, a distinction which we find existing even in Pascal's time, Pomponatius was able, in spite of this doctrine, to continue on good terms with the Church (E. Renan, *Averroës*, 3rd ed. p. 322 et seq.).

Descartes: the Soul defined by Thought, its Separate Existence.

Descartes discovered in the very fact of doubt a fundamental truth: I who doubt, think; I think, therefore I am; I may imagine that I have no body, but as long as I think I still continue to exist. The idea of thought is therefore distinct from the idea of extension, and my own thought

is the only thing which it is impossible for me to doubt. I am *res cogitans*, that is to say, *res dubitans, intelligens, affirmans, negans, volens, nolens, imaginans quoque et sentiens* (2nd Meditation). The 2nd Meditation, however, only establishes an ideal distinction between mind and body; a distinction which exists only for the thought which knows them by different means. But is this distinction *in abstracto* a real, concrete distinction? This objection was made against Descartes after the publication of his *Discours de la Méthode*. It was argued that, from the fact that the soul knows itself as a thinking thing, it does not follow that the soul is nothing but a thought. Could not extension be a property of soul, of which we are not aware? Descartes replies that, in the 2nd Meditation, as in the *Discours de la Méthode*, he has postponed the question of the real distinction. It is not till the 6th Meditation that he attacks this problem. To ideas that are clear and distinctly conceived, distinct realities correspond, because God cannot deceive us, and His omnipotence can realize everything that we conceive. Descartes had need of the divine veracity and omnipotence in order to establish that every clear and distinct idea must correspond to a distinct reality; and this is why he waits until the 6th Meditation to prove the real distinction between the soul and the body. The 2nd Meditation proves by the *Cogito ergo sum*, that thought is an ultimate notion; the 4th Meditation establishes the divine veracity and power; the 6th Meditation concludes:

"Since, on the one hand, I have a clear and distinct idea of myself, in so far as I am only a thinking and unextended thing, and as, on the other hand, I possess a distinct idea of body, in so far as it is only an extended and unthinking thing, it is certain that I, that is my mind, by which I am what I am, is entirely and truly distinct from my body and may exist without it" (6th Meditation).

Spinoza: The Soul of the World is the Idea of Extension; The Human Soul is the Idea of the Human Body.

One of Descartes' disciples, Regius (Lerøy) had said to him: Thought and extension are ultimate attributes, no doubt, but why should not one and the same substance underlie two different attributes? And this question contains the principle of Spinoza's philosophy. "God, or substance, consisting of

infinite attributes, each one of which expresses eternal and infinite essence, necessarily exists" (*The Ethic*, Part I, Prop. XI). The great difficulty was to pass from this sole substance to the finite beings revealed to us by our ordinary experience. Spinoza seems to have sought, for this transition from unity to plurality, in what he calls the *infinite and eternal modes*. That which results from the essence of a divine attribute, can only be an eternal and infinite mode. The idea of God, for instance, is an eternal and infinite mode, by which the attribute of the divine Thought reveals itself: the idea of God is the representation in thought of all the divine attributes. Thought, being by nature representative, expresses all the forms of Being. Therefore the idea of God embraces the idea of extension and also that of thought, and these ideas are eternal and infinite modes of the second degree.

Let us consider things in the same way, from the point of view of extension. Motion and rest are eternal and infinite modes of the first degree; the *facies totius universi* is an eternal and infinite mode of the second degree; in other words, it is deduced from a mode of the first degree (*Letter to L. Meyer*). This aspect, this '*facies*' of the universe, though varied by the infinity of its successive modes, remains the same, because the proportion of rest to motion does not change.

"If the parts composing an individual become greater or less, but in such proportion that they all preserve the same mutual relations of motion and rest, the individual will still preserve its original nature, and its actuality will not be changed" (*The Ethics*, Part II, lemma V).

Corporeal individuality is defined as a system of related parts. There is nothing to prevent several individuals from fitting into one another and thereby forming a more complex individuality. From this point of view, the whole world is one immense individual: its body is, all the modes corresponding to the attribute of extension, deduced, however, from those eternal and infinite modes which constitute their unity; its soul is the idea of extension. The idea of extension embraces the ideas of all the separate modes of extension. Now, a soul for Spinoza is nothing else than the idea of a mode of extension. The idea of extension therefore embraces all souls: is, in fact, the universal soul (see *Œuvres de Spinoza*, trad.

Saisset, *Introduct.* p. 86 *et seq.*). But in Spinoza's system the difficulty is not so much to attain unity as to account for the many, to break up this unity into the multiple appearances. We can, perhaps, conceive how it is that the eternal and infinite modes of the first and second degree allow of a reconciliation between the unity of the attributes, and consequently of substance and the infinite succession of the *given* modes; but what is not at all clear is how we are to pass from those eternal and infinite modes to the finite modes, which vary the *facies totius universi*.

Spinoza deduces from his system a theory of the human soul. Extension and thought are not, as Descartes supposed, distinct substances, but ultimate attributes of one and the same substance. The human soul is the idea of the human body, as the soul of the world is the idea of extension. Thus reduced to the idea of the body to which it belongs, the soul does not exist, but is in a state of perpetual change like the body itself. Its thoughts and actions follow each other according to the affections of the body, and it is merely a series of thoughts and volitions determined from without. The soul is thus a sum, a totality, or rather a sequence that has no real unity or identity. The individuality of the human soul is only a reflection of the individuality of the human body, all of whose parts are maintained in an unchanging relation by a constant law. How is this theory of the soul to be reconciled with the possibility of adequate knowledge, which is the *raison d'être* of Spinoza's *Ethics*? How is it that the soul which is defined as the "idea of a body" can go beyond the individual, leave the particular body, and possess the universe in contemplating things under the form of eternity? It is because the human soul, although, on the one hand, only as it were a reflection of the body, is, on the other hand, connected with God; there is in God an "idea of the soul," which is united to the soul, as the soul, or "idea of the body," is united to the body (*Eth* II. Prop. XXI).

Leibnitz: Theory of Monads; the Pre-established Harmony takes the place of the Soul of the World.

Descartes would not admit the existence of any soul except the human soul; Spinoza maintained the distinction

between thought and extension, and in his system there was, if I may so speak, as much soul as extension. Leibnitz reduces extension itself to soul; so that his world consists of nothing but an infinite number of souls which possess infinitely various degrees of perfection. Leibnitz had, at first, adopted the Cartesian mechanical theory, but, while seeking the ultimate principles of the laws of motion, he was much surprised to perceive that it was impossible to find these laws in mathematics alone, and that it was necessary to return once more to metaphysics (Erdm. 720).^{*} Moreover, matter is compound, divisible, and hence pure multiplicity. But multiplicity can derive reality only from real units. "And there must be simple substances, since there are compounds; for a compound is nothing but a collection or *aggregatum* of simple things" (*Monad.* 2, Latta's trans. p. 217).

From extension and matter, we are, therefore, brought back to entirely immaterial units; in other words, to the *formal atoms*, atoms of substance, metaphysical points which differ from the atoms of Epicurus in that they are unextended; for extension is only a phenomenon, and not, as the Cartesians taught, the essence of bodies.

What constitutes the reality of these *immaterial atoms* is force.

"Active force differs from the bare potency commonly recognized in the Schools. For the active potency, or faculty of the Scholastics, is nothing but a mere possibility of acting, which, nevertheless, requires an outer excitation or stimulus, that it may be turned into activity. But active force contains in itself a certain activity [*actus*], and is a mean between the faculty of acting and action itself. It includes effort, and thus passes into operation by itself, requiring no aids, but only the removal of hindrance. This may be illustrated by the example of a heavy hanging body stretching the rope which holds it up, or by that of a drawn bow" (Erdmann's En. 122 b).

But can we not get beyond this merely external notion of force?

"Force, you say, we only know through its effects, and not as it is in itself. My answer is, that this would be true, if we did not possess a soul, and if we did not know our soul."

Our inner experience reveals to us an active, real force, which is the only force we know, namely, our soul (*Ibid.*

185 b). We must, therefore, conceive the metaphysical atoms after the image of our souls (*Ibid.* 124 a). Substances can only be souls in the most general sense of the term. Their unity is ultimately found to consist in perception and thought, their force in tendency and appetition.

"Thus the world is not a machine as Descartes and Hobbes would have it. Everything in it is force, soul, life, thought, desire; what we see is the machine, but we only see the outside of Being. Being is that which itself sees" (Boutroux. *éd. de la Monad.*).

Perception explains both the unity of each monad, and the infinite diversity of the monads. Perception involves multiplicity in unity. *Perceptio nihil est quam multorum in uno expressio* (Erdm. 438). What do the monads perceive? The entire universe, but each from a point of view that is peculiar to itself; and it is its point of view that constitutes the individual monad. There are degrees in perception: below apperception, or conscious and distinct perception, there is unconscious perception, and the two terms are joined by a continuous series of stages. The degree of distinction in perceptions constitutes the degree of perfection in the monads, not one of which is identical with another (this is the principle of indiscernibles). Since the monad is a created thing and subject to change, and since its nature is perception, any change in it can only be the transition from one perception to another. *Appetition* is the effort made by the monad to pass from one internal state to another. The law which governs this effort is the law of final causes, to which consequently the law of efficient causes is subordinate, since material mechanism is ultimately found to be the expression and symbol of this effort of the monads. As our will is always directed towards the good, so the appetition of the monad is an effort towards a more perfect internal state than the preceding one; in other words, it is a tendency towards more distinct perceptions (Erdm. 706).

If there are nothing but souls, how are beings distinguished from one another? As we have said, by the differences of these perceptions. There is an infinite number of degrees in perceptions, and hence an infinite number of degrees in living things (*Ibid.* 676). Leibnitz, however, distinguishes three kinds: beings having merely life, animals, and men.

The merely living thing is the monad joined to an appropriate body. Its perception is unconscious and both perish together. *Omne corpus mens est momentanea*. The second degree is that of the monad endowed with a more distinct perception, i.e. with feeling; such a monad may be called a soul; when united to its proper body it is an animal. The third degree is that of the soul endowed with reason and reflection, or *minds* (spirits). The spirits are characterized by knowledge properly so-called, by self-knowledge, by the possession of universal truths, and consequently, the possibility of demonstrative knowledge.

The monads, being simple, cannot act upon one another. How then can these beings which are not directly related, but independent of one another, form a whole, or cosmos? And how, amidst this universal harmony, are the partial harmonies to be explained? "Some moderns have not seen any objection to this theory of a single and universal soul which absorbs all the others. The doctrine of pre-established harmony is the most effective way to remedy this evil" (*Théod., Disc. de la Conform. de la Raison et de la Foi*, § 10).

All the monads are in reciprocal agreement. All the acts of any monad whatever are, in their infinite series, in relation to all the acts of all the other monads. He who could open out, as it were, the folds of a monad, would read therein the history of the world: *Dum Deus calculat fit mundus*. In this way the unity of the world is explained: each monad acts spontaneously, on its own account, but out of all these independent acts arises the universal harmony which was the reason of its being. The law governing this harmony is the Good, the subordination of that which is less good to what is better. In this way the partial harmonies as well as the total harmony become conceivable; one monad is more perfect than another in so far as in it is found that which serves to account *a priori* for all that takes place in the other. All the monads of the human body, for example, are independent, but in the series of their acts they harmonize with the monad soul, and this explains both the visible harmony of the human body and its relations with thought.

The Empiricists: Materialism of Hobbes; Locke's indecision; Phenomenalism of Hume and Stuart Mill.

A development parallel with that of the Idealism which began with Descartes, took place in the Empirical School

founded by Bacon. Hobbes was a bold and consistent Materialist. Like the Stoics, he identifies substance with body: the spiritual is the non-existent, a mere abstraction; and all phenomena are reducible to movements, to changes of position in space. There can be no causality except a mechanical causality, and sensation is merely the motion of corporeal parts produced by the external motion of things. The mind is a body, all the phenomena of which can be reduced to motions.

"Spirits are thin, aerial, invisible bodies. Spirit and incorporeal are words of contradictory signification. If men give to God such a title (i.e. the title of 'Spirit incorporeal') it is piously to honour Him with attributes of significations as remote as they can from the grossness of bodies visible" (*Leviathan*, I, Ch. II).

Locke holds with Descartes that an inner feeling gives me the consciousness of myself.

"Self is that conscious thinking thing, whatever substance made up of (whether spiritual or material, simple or compounded, it matters not), which is sensible or conscious of pleasure and pain, capable of happiness or misery, and so is concerned for itself, as far as that consciousness extends" (*On the Human Understanding*, II, xxvii, § 17).

My *Ego* is characterized by consciousness and identity; it extends, in a way, as far as my memory. But what is the substance of the soul? On this point Locke is very cautious.

No one has any idea of substance, but only the supposition of "he knows not what support of such qualities which are capable of producing simple ideas in us (Ch. 23, § 2) . . . having no other idea or notion of matter, but something wherein those many sensible qualities which affect our senses do subsist; by supposing a substance wherein thinking, knowing, doubting, and a power of moving, etc., do subsist, we have as clear a notion of the substance of spirit as we have of body; the one being supposed to be (without knowing what it is) the substratum of those simple ideas we have from without, and the other supposed (with a like ignorance of what it is) to be the substratum of the operations we experience it in ourselves within . . . and therefore, from our not having any notion of the substance of spirit we can no more conclude its non-existence than we can for the same reason deny the existence of body" (*Ibid.* § 5).

In each case we assume an x , an unknown quantity; and hence, while, on the one hand, we have no reason to deny the existence of spiritual substances, it is not impossible on the

other hand that God has endowed matter with the faculty of thought.

"We have the ideas of matter and thinking, but possibly shall never be able to know, whether any mere material being thinks or no; it being impossible for us, by the contemplation of our own ideas, without revelation, to discover whether Omnipotency has not given to some systems of matter, fitly disposed, a power to perceive and think, or else joined and fixed to matter so disposed a thinking, immaterial substance" (*Ibid.* IV, iii, § 6).

Locke's Empiricism was carried to its ultimate logical consequences by Hume. There must be always some impression to give rise to a real idea, but there is no impression corresponding to the idea of substance; we have therefore no knowledge of any substance, of bodies no more than of souls. The *Ego* is neither simple nor identical, but merely an ever-changing series, a complex collection of representations.

"If anyone, upon serious and unprejudiced reflection, thinks he has a different notion of *himself*, I must confess I can reason no longer with him" (*Treatise of Human Nature*, I, iv, 6).

And yet we commonly believe in the identity and simplicity of the self. Whence arises this illusion? Since each one of our perceptions is distinct and separate from the others, how is it that they are joined together in such a way as to give us the idea of a self-identical *Ego*? This subjective appearance is explained by the laws of association. Images of our past sensations are unceasingly being presented to us by memory. These images form a chain; and through habit our imagination goes so rapidly from one link of this chain to another, that the series of distinct elements, joined as it were end to end, finally appears to us as a solid, continuous whole. Thus memory not only reveals to us our identity, but takes part in its production. The relation of cause and effect completes the work of determining the notion of the *Ego* by binding together its elements. Impressions give rise to ideas corresponding to them, and ideas in their turn produce other impressions. Our mental states are thus linked together according to the laws of a determinism by which thought is led from one state to another. My present pleasure or pain leads me to reflect on an action already done; and, similarly, in forming a resolution in the present, I foresee

the future pleasure which I expect to derive from it. Thus the law of causality gives to the *Ego* at once an extension and a unity which it could not derive from memory alone.

"But having once acquired this notion of causation from the memory, we can extend the same chain of causes, and, consequently, the identity of our persons, beyond our memory; and can comprehend times, and circumstances, and actions, which we have entirely forgot, but suppose in general to have existed. How few of our past actions are there of which we have any memory? Who can tell me, for instance, what were his thoughts and actions on the 1st of January, 1715, the 11th of March, 1719, and the 3rd of August, 1733? Or will he affirm, because he has entirely forgot the incidents of those days, that the present self is not the same person with the self of that time; and by that means overturn all the most established notions of personal identity? In this view, therefore, memory does not so much produce as discover personal identity by showing us the relation of cause and effect among our different perceptions" (*Ibid.*).

Our belief in the real simplicity of the self is explained in the same way as our belief in its real identity. An object, the different co-existing parts of which are closely joined together, appears to the imagination as a perfectly simple and indivisible object. In a word, mind is a collection of internal phenomena, which, given the laws of imagination, necessarily appears as a simple and identical substance.

Stuart Mill adopts Hume's theory:

"Our notion of mind, as well as of matter, is the notion of a permanent something, contrasted with the perpetual flux of the sensations and other feelings, or mental states, which we refer to it; a something which we figure as remaining the same, while the particular feelings through which it reveals its existence change. . . . The belief I entertain that my mind exists when it is not feeling, nor thinking, nor conscious of its own existence, resolves itself into the belief of the Permanent Possibility of the state. . . . Thus far, there seems no hindrance to our regarding mind as nothing but the series of our sensations (to which must now be added our internal feelings) as they actually occur, with the addition of infinite possibilities of feeling, requiring for their actual realization conditions which may or may not take place, but which, as possibilities, are always in existence, and in many of them present" (Mill, *Exam. of Hamilton*, Ch. XII, pp. 205, 206).

But Stuart Mill perceives in his own theory a difficulty which he admits to be insurmountable.

"If therefore we speak of the mind as a series of feelings, we are obliged to complete the statement; by calling it a series of feelings which is aware

of itself as past and future; and we are reduced to the alternative of believing that the Mind, or Ego, is something different from any series of feelings, or of possibilities of them, or of accepting the paradox, that something which, *ex hypothesi*, is but a series of feelings, can be aware of itself as a series" (*Ibid.* pp. 212, 213).

French Materialism in the 18th Century, and German Materialism in the 19th Century.

The doctrine of Materialism is not, as some suppose, an empirical doctrine. Locke, Hume, and all the Empiricists recognize the impossibility of reaching substance. Science does not require any metaphysical system, since it only deals with phenomena; and it is a mere illusion on the part of the materialists, when they believe themselves to speak in the name of science. De la Mettrie (*Histoire Naturelle de l'Âme, l'Homme-machine*) dwells on the relations between the soul and the organism, and on their parallel development, and in this way he tries to reduce mind to body. Helvetius and Saint-Lambert shared his views. D'Holbach identifies matter with force: everything is material and everything is active. This doctrine ends in a sort of Dynamical Materialism, in which the Epicurean Atomism is combined with the Hylozoism of the earliest Greek philosophers. The soul is not distinguishable from the brain; thought consists in the hidden, imperceptible movements of the finest fibres of the brain. It is the difference in brains that causes the difference in minds: the soul is merely the resultant of the organic mechanism.

The remarkable progress which has been made in our time in the physiology of the nervous system, has not unnaturally brought about a revival of Materialism. But, though physiology continues to determine with increasing precision the relations between physical and mental facts, between the organism and thought, the materialistic theory of the soul has not changed, and depends entirely on the same aphorisms: "Spiritual activities are, merely the functions of the brain, that is, of a material substance" (Karl Vogt, *Köhlerglaube und Wissen*, 1854). "Thought is to the brain what bile is to the liver, or urine to the kidneys" (Moleschott, *Kreislauf des Lebens*, 1852).

Now the facts which have been collected by physiology and pathology are most interesting, but, they in no way prove

the theory of Materialism. To Karl Vogt's naïve assertion "that physiology is categorically opposed to an individual immortality, and in general to all the hypotheses referring to the existence of a distinct soul" (*Ibid.*), it is enough to reply in the modest and profound words of Dubois Raymond: "As regards the enigma: what is force? what is matter? and how are they capable of thought? Naturalism must resign itself once for all to the decree: *Ignorabimus.*"

Kant: Paralogisms of Pure Reason; Impossibility of Passing from the Unity and Identity of the Ego to the Unity and Identity of a Spiritual Substance.

The hypothesis of a world-soul was suggested to philosophers by the unity of the universe, as the hypothesis of a human soul is suggested by the unity of thought. According to Kant, thought and the world are interdependent (see Vol. I, Ch. IV, *Problem of Reason*); the unity of thought constitutes the unity of the world, which alone renders thought possible. In knowledge, we must distinguish the matter and the form. The matter is given by sense and consists of all phenomena; the form is the subjective laws, which out of this chaos of elements make a coherent whole. Thus, instead of a world-soul, we have in Kant the categories of the understanding, which, being applied to phenomena, form the inflexible determinism which makes knowledge possible, and gives reality to the universe. In the same way, in the *Critique of Pure Reason* the human soul also resolves itself into laws of thought.

We can no more infer from the *Ego* of which I am conscious, from the one and identical thought, the existence of a soul which is a substance, than we can from the unity of the universe infer a soul of the world.

"In this process of rational psychology, there lurks a paralogism which may be represented by the following syllogism: That which cannot be conceived otherwise than as a subject, does not exist otherwise than as a subject, and is therefore a substance. A thinking being, considered as such, cannot be considered otherwise than as a subject. Therefore it exists also as such, — only, that is, as a substance. The thinking is taken in each of the two premises in a totally different meaning. In the major, it refers to an object in general (and therefore also as it may be given in intuition), but in the minor, only as it exists in its relation to self-consciousness, where no object is thought of, but where we only represent

the relation to the self as the subject (as the form of thought). In the former, things are spoken of that cannot be conceived otherwise than as subjects; while in the second we do not speak of things but of the thinking (abstraction being made of all objects), wherein the *Ego* always serves as the subject of consciousness" (*Critique of Pure Reason, Transc. Dialectic*, Bk. II, Ch. I).

Thought appears to itself as one and identical; this is the condition of its very existence. From this we learn nothing new; he who says "thought," says "subject perceiving itself, and knowing itself in the series of its successive ideas"; the judgment is an analytic judgment. This general unity of thought, this *transcendental apperception* is the first condition which determines all the categories, all the forms of thought. These have meaning and value only because they are the means which co-operate in producing the unity of consciousness. But it is only by a paralogism, by a sophistical use of the principle of substance, that rational psychology professes to pass from the *Ego* of consciousness to the soul, from the phenomenal to the noumenal *Ego*, and to transform an analytic judgment which merely unfolds the concept of thought, into a synthetic judgment which presents the *Ego* I am conscious of as a single and self-identical substance.

"Thus if Materialism was inadequate to explain my existence, Spiritualism is equally insufficient for that purpose, and the conclusion is, that, in no way whatsoever can we know anything of the nature of our soul, so far as the possibility of its separate existence is concerned. And how indeed should it be possible by means of that unity of consciousness which we only know because it is indispensable to us for the very possibility of experience, to get beyond experience (our existence in life) and even to extend our knowledge to the nature of all thinking beings in general, by the empirical, but, with reference to every kind of intuition, undetermined proposition, "I think." . . . We see from all this, that rational psychology owes its origin to a mere misunderstanding. The unity of consciousness, on which the categories are founded, is mistaken for an intuition of the subject as object, and the category of substance applied to it. But that unity is only the unity in thought, by which alone no object is given, and to which, therefore, the category of substance, which always presupposes a given intuition, cannot be applied, and, therefore, the subject cannot be known" (*Ibid.*).

Are we, then, condemned to know nothing of our own nature? Science inevitably leaves us in the world of phenomena; but if we turn from pure reason to practical reason,

from the faculty of thought to the faculty of action, moral faith will throw new light on our nature. The idea of duty implies the freedom of the will. As a moral being subject to the law of duty, man is independent of the mechanical laws of nature; he is a person, and belongs to the kingdom of ends-in-themselves, of noumena. The mind which feels and thinks perceives itself only as a phenomenon, the mind which wills and acts knows itself as a noumenon. For pure reason, the mind is merely the phenomenon of an unknown thing-in-itself; for practical reason, the mind is an autonomous and free being.

Return to Metaphysics. Fichte, Schelling, and Hegel : Absolute Spirit.

Kant had closed the world of noumena against intelligence; yet out of his philosophy arose the boldest Idealism. Fichte abolishes these unknown and unknowable things-in-themselves. What remains? The mind, the *Ego*. From this single principle all things must be deduced. But this absolute *Ego*, the starting point of philosophic deduction, is not to be confounded with the individual empirical *Ego*, revealed to us by consciousness. The absolute *Ego* is known by an intellectual intuition which is the immediate consciousness of action. "The will is the very essence of reason, the practical power is the deepest root of the *Ego*." The mind is activity, energy, and this activity is reality itself. "The conscious subject and the principle of reality are identical." The mind makes all that it knows; it knows because it acts, and in every act of cognition it knows itself, in all knowledge it knows something concerning itself. As the *Ego* alone exists, the science of the mind is the science of reality. The sensible world is an illusion born of the play of the forms and categories, which opposes to the *Ego*, and yet within the *Ego*, something that seems external to it. But the illusion is a necessary one, and springs from the nature of spirit and its ends. In the same way, from the absolute *Ego*, as a necessary moment in its development, and from the *Non-ego* posited by the *Ego*, the real plurality of the individual *Egos* is deduced. Thus for Fichte the only reality is the spiritual reality, the Absolute *Ego*, the universal soul whose essence is activity and which in its development sets opposite to itself

'an external and illusory world,' and divides itself into a plurality of free and active beings.

Fichte, being concerned solely with the moral life, admitted the actuality of spiritual reality alone. Schelling, who was well versed in natural science, endeavoured to escape from this subjectivity, and to restore reality to the world without separating it from the mind. The real and the ideal, the objective and subjective, are, as it were, the two poles of the Absolute. The task of philosophy is to evolve alternately Nature from intelligence, and intelligence from Nature, and thus to establish the identity of the two terms; philosophy is completed by the science of the Beautiful which is created by the simultaneous operation of the conscious and the unconscious, blended in the inspiration of genius. The unity and progress of the world can only be explained by a world-soul (*Weltseele*), a plastic principle which organizes the universe. This world-soul, this Absolute, which in its indifference embraces and reconciles the subject and the object, is apprehended by us in an intellectual intuition (*intellectuelle Anschauung*), of our deepest being. That which in our minds arrives at self-consciousness is the very activity which in Nature created the universe. Matter is spirit with its fire extinguished. Reality is the evolution of the Absolute, the life of the universal soul; and philosophy is the history of God. Mind can only be understood by a construction of the universe: the plurality of souls is only a means employed by the Absolute to develop itself by becoming more and more conscious of itself and of its freedom.

Hegel holds with Schelling that all things come from the Absolute, but he reproaches his predecessor with having posited the Absolute without defining it: *das Absolute sei wie aus der Pistole geschossen*, (his Absolute was, as it were, shot out of a pistol). For Hegel the Absolute is the *Idea*, reality is the *Truth*. Consciousness is only a moment in the evolution of Being. To absolute knowledge, being and thought are identical; the rational is the real, the real is the rational. Metaphysics is a system of Logic. Hegel's *Logic* develops the system of the concepts which express all the developments of nature and of spirit. His method is a dialectic, proceeding by *thesis*, *antithesis*, and *synthesis*, and thus advancing from contra-

ditions to ever fuller and more complex reconciliations; a real dialectic which is not created by consciousness, but whose movement is the same as the movement of the evolution of things. The *Logic*, in an unbroken dialectical chain, leads to the *Philosophy of Nature*, that is to say to the Idea estranged, as it were, from itself; and this again leads to the *Philosophy of Spirit*, or to the Idea which has returned from nature to itself, and assumes, along with possession of itself, an existence that is independent.

The development of Spirit is the logical process which leads it from dependence on nature to freedom, which is its essence. The moments of this progress are the *Subjective Spirit*, the *Objective Spirit* and the *Absolute Spirit*. The *Subjective Spirit* as depending on nature and on the body (human temperament, sleep, etc.) is the object of *Anthropology*. *Phenomenology* deals with the *Subjective Spirit* in its progressive elevation towards reason; *Psychology* considers it in its speculative and practical powers. Intelligence emancipates itself speculatively when it recognizes that all is reason realized; practically, when its content is determined by will.

The unity of will and thought is the active energy of a freedom that determines itself. The essence of morality is will taking reason as its end; which means that the mind is free when it recognizes that it creates everything, when, consequently, it wills everything that it creates; in other words, when the Idea, conscious of itself and of its products, recognizes itself as God in the spirit. Objective Spirit consists in the products of the will: customs, laws, states. Absolute Spirit is *Art*, which is the Idea appearing in a determinate form; *Religion*, which is the form under which the Absolute appears to imagination and to feeling; *Philosophy*, which is the idea thinking itself, truth knowing itself, conscious reason. The divine Spirit finds itself again and comes to rest in Hegel's mind and in that of his disciples. The truth, which is now the soul, is God Himself.

Scottish and French Spiritualism.

In the meantime a less ambitious philosophy was being developed in Scotland and France. Reid, the founder of the Scottish school, appealed to common sense as a means of

escape from the scepticism of Hume. "I take it for granted that all the thoughts that I am conscious of or remember, are the thoughts of one and the same thinking principle, which I call *myself*, or *my mind*" (*On the Intell. Powers*, I, Ch. II). He endeavours, nevertheless, to prove by logic the existence of the soul which he had begun by assuming without discussion. Starting from a common-sense principle, he says: "Every action or operation therefore supposes an agent; every quality supposes a subject. . . . We do not give the name of mind to thought, reason, or desire, but to that being which thinks, which reasons, which desires" (*Ibid.*). In order to determine the nature of the soul he reasons from phenomena to an underlying substance. "My personal identity therefore implies the continued existence of that indivisible thing which I call myself."

Royer-Collard accepted the doctrines of Reid. Maine de Biran insists strongly on the difference between the knowledge of self which is immediate and direct, and our knowledge of external things which is mediate and indirect. The soul considered in its substance is an unknown quantity, but, through reflection on itself, the subject knows itself as a cause, and distinguishes itself from all its phenomena. In the primitive fact of effort, the *Ego* already apprehends itself in its antithesis to the *Non-ego*, and consequently posits itself in its opposition to that which is not itself. Jouffroy, who at first followed Reid in his inference of substance from phenomena, finally associated himself with this theory, according to which, it is through intuitive reflection alone that we reach the *Ego*. M. Ravaisson, developing Maine de Biran's ideas, maintains that reflection does not give us, besides itself, some unknown substance; but that it apprehends that very essence of the soul which is, in the first place, force, and finally love, since force presupposes a tendency. At the same time he insists on the incessant passage of life into thought, and he abandons the Cartesian dualism for a doctrine which approaches the theories of Leibnitz and Schelling.

Conclusion.

The hypothesis of a soul is suggested by the necessity of finding a reason both for the unity of the universe and

for the unity of the body and of thought. Hence the hypothesis of a universal soul and of individual souls. The theory of a world-soul is apt to reappear whenever men have tried to dispense with a creative and providential God. Materialism, Empiricism, Criticism, Spiritualism are, as we have seen, the chief solutions which have been proposed. Materialism, evading the question, leaves us only a principle of division and multiplicity, which it has not even succeeded in defining. Empiricism, by developing in its analyses the data of the problem—which it refuses to attack—has assisted in making the problem stand out more clearly. Criticism, in the *a priori* forms of thought, provides an explanation of both the concatenation of phenomena and the unity of the mind. The different metaphysical hypotheses are the result of repeated efforts to find for the harmony of the universe, as for the unity of the body and the human mind, a real principle which would be their sufficient reason.

CHAPTER IV

THE RELATIONS BETWEEN MATTER AND MIND

THOSE systems of philosophy which exclude dualism are yet obliged to account in some way for the appearances which have suggested the hypothesis of two ultimate substances. Every metaphysical theory admits the existence of an active and a passive principle, and seeks in the relations of these two terms an explanation of nature and of human life. What we have then to look for in History are the solutions successively proposed for the problem which in its acute form, so to speak, becomes the problem of the intercommunication of substances. In this way we shall complete our summary of the essential elements in the great metaphysical theories concerning nature and man.

Pre-Socratic Philosophy: Confusion between Active and Passive Principles.

As we have seen, the first Greek philosophers had no clear conception of the distinction between matter and mind. The element whose evolution constituted the world, was at once matter and force. Thales' fluid principle was a living, divine thing (Arist. *De Anim.* 411 a, 7). The air of Anaximenes was in perpetual motion, and was God (Cic. *De Nat. Deor.* 1, 10). Diogenes of Apollonius, to explain the order of the world, contents himself with making intelligence an attribute of the material element (air), which, according to him, constitutes the substance of things (Simplic, *In Phys.* 36b). With Heraclitus, fire is at once the primary element of things, the

principle of motion by its incessant transformation and by the law of the union of contraries immanent in it, and the principle of harmony. In man, body and mind are distinguished, but this distinction does not go so far as to represent them as opposite substances. Body is fire densified: spirit is the primitive fire in its purity (Arist. *De Anima*. 1, 2, 405 a, 25).

The distinction between the corporeal and the incorporeal was unknown to the Eleatics also. Parmenides describes Being as a continuous, homogeneous, limited mass, extending in every direction equally from its centre (V, 102 sq.). Thought, to him, was not distinct from Being; outside of Being there was nothing, and all thought was thought of Being (V, 94).

The Pythagorean cosmology was based on the principle of order and harmony. The earth was not the centre of the universe, because of itself it is without light. The central fire was luminous and motionless, because light and rest stand in the series of things that are good. Are we to understand from this that for the Pythagoreans the principle of harmony was something distinct from the matter which it governs? Certainly not. What we find in the world is the quality of the elements which constitute it. If all things are made of Numbers it is because Number is the substance of things. "Undoubtedly," says Aristotle, "they appear to consider Number to be a first principle, and, as it were, a material cause of things, and of their divers modifications and habits" (Aristotle, *Metaph.* Book V, 3, 986 a, 15).

In the doctrine of Democritus, motion was eternal, and therefore the hypothesis of any motor cause distinct from matter was superfluous. The soul consisted of atoms which were connected with its moving and life-giving power, and filled the whole universe. The air contained a great deal of soul and of reason, because it contained a great many psychical atoms: ἐν γὰρ τῷ αἵρι πολλὸν ἀριθμὸν εἶναι τῶν τοιούτων, ἃ καλεῖ ἐκεῖνος νοῦν καὶ ψυχῆν (Arist. *De Resp.* c. 4). Ignited atoms engendered motion and life through their physical properties, and when accumulated in a great mass they produced thought, which was merely a kind of motion. The human soul being an extended thing, there

was no difficulty in placing it in the body; it, in fact, pervaded the whole body.

Empedocles distinguishes from his four material elements, two moving forces, love and hate; the former joins and combines the elements, while the latter separates them (V, 80 sq.). However, he treats these two forces at one time as mythological beings, at another as corporeal elements mixed with things.

Anaxagoras was the first to distinguish the force which moves, from the matter which is moved. He sets above the elements the Intelligence which governs them, but his *Nóus* has still something of a natural or impersonal corporeal force. It is the purest, the most subtle of things: *λεπτότατόν τε πάντων χρημάτων καὶ καθαρώτατον* (*Fr.* 6), and seems to penetrate all things like an extended fluid. Indeed, Socrates (*Phaedo*, 98 b) and Aristotle (*Met.* 1, 4, 985 a, 18) reproach Anaxagoras with having made no use of the principle which he invented, with having only made intelligence intervene when he was unable to discover the mechanical causes of a phenomenon.

To sum up: the distinction between matter and force was not perceived either by the old Ionic philosophers, or the Pythagoreans, or the Eleatics. Democritus got rid of the problem by boldly carrying back the origin of motion to infinity. With Empedocles, and, more clearly still, with Anaxagoras, the notions of matter and force began to be distinguished, but the notion of force itself was still very vague, and its action on matter could only be explained by mixing it with the latter, as if it were a kind of extended fluid.

It is not easy to say what was Socrates' conception of matter and of its relation to mind; for though he willingly dwelt on the proofs of design in nature, he did not trouble himself much with the greater metaphysical problems. The universe, he said, was a work of art which presupposed a Divine Artist; and as for God's relation to the world, we have a kind of experience of it in the relation of our soul to our body (*Mem.* I, iv, 17). This was not a solution of the problem, but merely another way of expressing it.

Plato: Matter is Non-being; the Bodily Mechanism is subordinate to the Ends of the Soul.

Matter for Plato was Non-being. In his system there is, consequently, only one reality, one substance, which is the Idea; phenomena are "rays of the Ideas, broken up in the void and obscurity of infinite space" (Zeller). But whence are we to derive Non-being? From the Idea? But this would be to deduce Non-being from Being. If the Idea alone is real all the reality of the sensible world must be in the Idea. On the other hand, if the Idea is immutable and eternal, if it is above plurality, above becoming, what is sensible cannot flow from it. Now, we seem to be logically brought back to dualism. Matter is not absolute Non-being, for it limits the being of the Idea in the sensible world. Plato appears to oppose matter to the Idea, as if it were an obstacle, or limit, as something which is external to the idea, and into which the idea never entirely penetrates. And if it is difficult to understand how the sensible world is derived from the world of Ideas, the question of the actual relation between these two worlds is not less obscure in Plato.

In the existence of the Ideas, there is nothing surprising, since, by their very definition, these Ideas constitute the whole of reality; but what is the use of the sensible world which exists alongside of the ideal one, and what is this other reality which is not reality? Plato thinks he solves this problem by his theory of *Participation* (*μέθεξις*). Sensible things exist only in so far as they participate in the Ideas. But how does this *μέθεξις* take place? How is it possible? How can the One and the Many, the immutable and the becoming, Being and Non-being, what is in space and what is above space,—how can these contradictory terms be joined together and combined in the unity of appearance; and how is their relation to one another in this unity to be conceived? (see Zeller).

In the *Timæus*, cosmology prepares the way for psychology. The cosmos, which is a system of spheres in rotation, is a living thing; it possesses a soul and a body. The cosmic soul is endowed with spontaneous motion and with knowledge; extending throughout the world from its centre to its

extremities, this soul moves the world in moving itself. It is quite certain that Plato does not mean this theory to be taken literally, and that in it many mythical notions are interwoven with the philosopher's true conception. In man the soul is higher than the body, and can exist without it, since it existed before it. The soul fulfils without the intervention of the body, its highest function, which is pure thought. On the other hand, the two terms are not altogether unconnected.

In the first place, the body is to be regarded as the instrument of the soul, which existed before the body, and therefore cannot be its harmony. Far from being its effect, the soul is rather the cause of the organization of the body, and it is in the needs, in the functions of the soul, that we are to look for the reason of the bodily mechanism. The soul is divided into three parts: *νοῦς*, *θυμός*, *ἐπιθυμία*. The *νοῦς* is situated in the head; the seat of the rational soul is the brain (*Tim.* 73 d); this higher soul is composed of the same elements as the cosmic soul, is endowed with the same properties of spontaneous motion and knowledge, and performs in the head, which is a kind of microcosm, the same harmonic evolutions. The *θυμός* is placed in the breast, between the *νοῦς* and the *ἐπιθυμία*, in order to carry out more properly the orders of the *νοῦς*, and at the same time be able to restrain the desires (*Tim.* 70 a). The *ἐπιθυμία* has its seat below the diaphragm, in the abdominal region (*Tim.* 70 c). But both these latter parts are connected with the spinal marrow, and in this way the unity of the three souls is represented in the bodily organism (*Tim.* 73 b). The heart, which is the starting-point of the veins, is the physiological centre of the *θυμός*: it takes orders from the *νοῦς* and transmits them through the blood-vessels to all parts of the body (*Tim.* 70 b). Impressions from without travel by the same paths, only in an opposite sense. Thus the blood-vessels are made to play the part of conductors, a function which we now ascribe to the nerves (*Tim.* 65 c). The *νοῦς* is connected with the *ἐπιθυμία* by the liver. The *ἐπιθυμία* cannot obey Reason directly, it can only be guided by images. On the polished and brilliant surface of the liver, as in a mirror, the *νοῦς* causes images that are either fearful or delightful, to appear, changes the natural sweetness of this organ into bitterness by the secretion of bile, or, on the contrary, restores it to its original condition by terrifying or soothing the part of the soul which dwells in that region of the body (*Tim.* 71 b).

In these assertions the important point is that the bodily organism has a psychical purpose, that the body is to be understood through the soul and is its instrument. This does not mean that the body does not react upon the soul. The

body is the source of the errors and passions by which most men are so strongly bound to sensible life.

A movement caused in the body by an external impression communicates itself to the movement of the soul (*Tim.* 61*d*). When these external impressions are too violent, exact knowledge is impossible. The health of the body is necessary to the health of the soul (*Tim.* 86-90), and *vice versa* (*Tim.* 66*e*). The best relation between these two terms is that of harmony and proportion (*συμμετρία*). This intimate relation between the organism and the mind explains the importance attached by Plato to generation. The qualities and defects of parents are transmitted by heredity to their children; the legislator should therefore possess the art of uniting temperaments in their most favourable proportions (*Polit.* 310).

We must confess that it is not clear how the condition of the bodies of the parents at the time of conception could so affect a soul which pre-exists the body it animates. Here we have in another form the problem of the transition from the intelligible to the sensible.

Aristotle: Matter and Form; Relation of Matter to Form; Correspondence between the Soul and the Body; The πνεῦμα.

In Aristotle's teaching, matter is that which can become either this or the other, which, considered in the abstract, is indifferent to any determination, and is the permanent subject of all change. Form is the *ἐνέργεια*, the realization of the potential and its completion, *ἐντελέχεια*. Form and matter therefore require no intermediate term to unite them: when the potential becomes the real, two substances are not combined, for matter is the thing as it exists potentially, and form is the same thing become real (*Met.* 1045*b*, 17).

Matter is not Non-being or a mere logical possibility: *ἐγγύς καὶ οὐσίαν πως τῆς ὕλης* (*Phys.* I, 9). It contains as a tendency, that of which the form is the reality: *ὄντος γάρ τινος θεοῦ καὶ ἀγαθοῦ καὶ ἐφελτοῦ, τὸ μὲν ἐναντίον αὐτῷ φαιμέν εἶναι, τὸ δὲ ὃ πέφυκε ἐφίεσθαι καὶ ὀρέγεσθαι αὐτοῦ κατὰ τὴν ἑαυτοῦ φύσιν* (*Phys.* I, 9). Matter aspires to attain form, which excites it to motion and makes it complete.

Matter without determination is a pure potentiality, and can never therefore be a reality.

Matter is always given in a determinate form: *οὐ χωριστή, ἀλλ' αἰ μετ' ἐναντιώσεως* (*De Gen. et Cor.* II, 1). The same thing may be in one

sense matter and in another form. Marble is matter with relation to the statue, and form inasmuch as it is marble. Thus matter arises from form to form in a progressive evolution. The first indeterminate matter, which we can only know by analogy, would in the last resort be found to underlie all reality; but, on the other hand, each thing has its own last and special matter (*ἑσχάτη, ἴδιος, οἰκάτω ἐκάστου*). The marble, for instance, is the last matter of the statue, and between these two extremes as intermediate terms, are all the forms successively taken by the first matter, before it became this last, determinate matter, to which this highest form is immediately united.

Between the *πρώτη ὕλη* and *εἴς* form, or God, we are to conceive a series of progressive forms, a hierarchy the terms of which presuppose one another. A continuous movement of the potential towards an ever-higher reality under the impulse of the desire which Divine Perfection awakens in nature, evolution and continuity, herein lies the solution of the whole problem: matter is no longer opposed to form as the non-existent to Being; the potential is the necessary antecedent of the actual; there is no opposition between the two terms, except in the sense that matter, according to the stage of development at which we take it, is only adapted to receive such and such a determinate form.

Aristotle appears in this way to avoid the difficulties which the Platonic conception involves. But the form, with him, is the universal, the object of knowledge; on the other hand, the universal only exists in particular beings, and the real is the individual which implies matter as well as form. This being the case, how could he say that matter is pure potentiality? If form is the true reality, and if, as such, it is opposed to matter, and to the compound of matter and form, how are we to reconcile the two statements that the form is the universal, and that the particular alone is real? Aristotle does not, in fact, succeed in harmonizing the Platonic and Empirical elements in his doctrine, according to which the universal is the real, and yet it is in the individual alone that the universal is found.

The union of soul and body is merely a particular case of the problem of the union of matter and form. The form has no existence outside of or apart from the matter of which it is the realization; the soul is the form of the body (*εἶδος*). Life is not to be conceived as a combination of heterogeneous elements,

σύνθεσις—σύνδεσμος (*Meta.* 1045). The soul is the active force in the body; the body is the natural instrument of the soul: *πάντα τὰ φυσικὰ σώματα τῆς ψυχῆς ὄργανα* (*De An.* II, 4). In a word, soul and body are correlative terms, logically separable but actually inseparable.

The soul can neither be without the body, nor be itself a body of any kind (*μήτ' ἄνέν σώματος εἶναι μήτε σῶμά τι ἡ ψυχῇ*), for it is not a body, but is yet something of the body (*σώματος δέ τι*), and, therefore, present innately in the body, and in a body peculiarly constituted: *καὶ διὰ τοῦτο ἐν σώματι ὑπάρχει, καὶ ἐν σώματι τοιούτῳ* (*De An.* II, 2). Not that we are to regard the soul as the resultant of two forces; as its formal and final cause, it is rather the principle, the reason of the organism: *ἐστὶ δ' ἡ ψυχῇ τοῦ ζῶντος σώματος αἰτία καὶ ἀρχή* (*De An.* II, 4). The soul is the realization (*ἐντελέχεια*) of that which, in the body, only exists potentially.

All the actions and passions of a living being have therefore two aspects—one of which is formal and of the soul, and the other material and of the body. When an animal or a man is angry, his emotion is at once a mental and a bodily fact. Regarded as a fact of the soul, it may be called a desire to injure one who has injured us; regarded as a fact of the body, it may be called an ebullition of the blood and a warmth in the region of the heart (*De An.* I, 1; see Alex. Bain, *Psychology of Aristotle*). These two aspects of the same emotion, though they may be logically distinct, are, in fact, correlative, and imply one another. In the same way, all our acts are at once physical and psychical; and health of the soul implies health of the body. The superiority of our organism is due to the fact that it is the instrument of a superior kind of soul; man does not think because he has hands, he has hands because he thinks (*De An.* II, 4). Aristotle, however, makes one exception. The active intellect, the *νοῦς ποιητικός*, has no bodily organ; it comes from without (*θύραθεν*), is separable (*χωριστὸς καὶ ἀπαθὴς καὶ ἀμικτός*), and alone eternal and immortal: *ἀθάνατον καὶ αἰδιόν* (*De An.* III. 5).

But is it not possible to determine more precisely the element in which the soul dwells, and with which it is communicated from one being to another in the act of generation?

Every kind of heat, according to Aristotle, the heat of the sun as well as that of organisms, is a principle of life (*ζωτική ἀρχή*). The living body and all its parts must have a material, innate warmth: *σύμφυτον*

θερμότητα φυσικὴν (*De Vit.* 4), the principle of which is in the heart, where the psychical fire, so to speak, burns (τῆς ψυχῆς ὥσπερ ἐμπεπνυμένης). The higher animals are those which possess more abundantly the θερμόν (*De Respir.* 13). Life is extinguished at the same time as the flame of the heart. The warmth communicates itself to the inner air, which, in this way, participates in the vital force. The seed is rendered fertile by the warmth that is in it (τὸ καλούμενον θερμόν). This warmth is not a fire but the πνεῦμα which is contained in the male and the female seed, or rather, the nature contained in this πνεῦμα (ἢ ἐν τῷ πνεύματι φύσις), a nature which resembles that of the stars: ἀνάλογον οἷσα τῷ τῶν ἀστρῶν στοιχείῳ—θειότερον τῶν καλουμένων στοιχείων (*De Gen. Anim.* II, 3). In short, the vital heat is the πνεῦμα, and the principle of the πνεῦμα is in the heart.

From this it seems probable that for Aristotle the vital heat is connected with air, but its primary principle is heat, since the pneuma is merely heated air, and participates in the properties of heat, which it spreads all over the body.

Theory of the πνεῦμα before Aristotle. Theory of the πνεῦμα with the Stoics. God and the World. The Soul and the Body, a Physical Mixture. The Epicureans: Animal and Rational Souls.

The theory of the πνεῦμα, of air mingled with the vital heat which refines and subtilizes it, played a most important part in the physiology of the ancients. This hypothesis was generally accepted as an explanation both of physical life itself and of the relation of soul to body. Even after the *pneuma* had become one of the most elevated conceptions of Christian theology (i.e. that of the Holy Ghost), all through the Middle Ages and until the discovery of the circulation of the blood, the physiological theory of the *pneuma* lost none of its importance. Descartes' theory of the animal spirits is the form in which it appears for the last time (see Herm. Siebeck, *Gesch. der Psych.*).

According to Heraclitus, it is from the outer air that, partly through respiration and partly through the organs of sensation, we derive the warmth which is the principle of life and of intelligence. Hippocrates, in his treatise, *De Aëre, Aquis, et Locis*, ascribes to the nature of the surrounding air a great influence on the organism and on the characters of races.

After Hippocrates the theory of the *πνεῦμα* became current in the physiology of the ancients. Physicians were agreed in finding a close relation between the two facts of animal heat and respiration. Air, they said, enters into the organism by means of respiration and becomes heated; the *πνεῦμα* is also formed by the evaporation of the humid elements through the action of the organic heat of the animal elements contained in the food introduced into the stomach. It circulates with the blood and flows all over the body; it acts at once mechanically according to its density and to its own motion, and dynamically as the principle of organization, or as a vital force. "The *pneuma* comes from the air, and flows through the veins, reaching thus the internal cavities of the body, and especially the brain, whence it determines our thought and the movement of our limbs" (Hipp. *De Morb. sacr.*).

The physician Praxagoras, who lived at the time of Alexander, distinguished the arteries from the veins. The veins were full of blood, and the arteries, which in a corpse are empty, only serve for the circulation of the air, or of the *pneuma*; and they play in sensation the part which we attribute to the nerves. As numerous anastomoses were found between the veins and the arteries, a whole theory of disease was based on the invasion of the arteries by the blood.

The Stoics, in their explanations of the relations between the soul and the body, followed their predecessors in most of their ideas concerning the *πνεῦμα*, but they developed this theory, and in their turn exercised a real influence on ancient physiology. According to them, the union of soul and body is only a particular case of the union of matter and force. All things are corporeal, all are derived from the primitive fire, and must return to it some day. In the actual state of the universe, however, in consequence of the relaxation which is gradually extinguishing the primitive substance, it is possible to distinguish the active from the passive, and inert matter from the rational and active cause. Not that matter and form are, as in Aristotle, principles that have a different origin although eternally bound together. Matter is derived from fire; form is corporeal, and is itself the *πνεῦμα πυρρῶδες καὶ τεχνῶδες*, the fiery, organizing breath or spirit. Form being corporeal, its union with matter cannot be anything but

a physical mixture, and since the essential quality of a body is present in all its elements, it follows that one body can penetrate the parts of another body, or, to use Plutarch's expression, that a body may be the place of a body (Plut. *Comm. Not.* 37, 2).

Thus the Stoics were led to deny impenetrability. They went so far as to say that a smaller body mixed with a larger one will become the same size as the latter: one drop of wine will make the sea red (I. *Æ.* vii, 151). In this way there is a mixture of all parts, *κρῖσις δὲ ὅλων*, of form with matter, of God with the world: *Divinus spiritus per omnia maxima ac minima aequali intentione diffusus* (Sen. *Consol. ad Helv.* 8, 3). The harmony between all the parts of the universe can only be explained by this tension of the Divine Creator: *haec ita fieri omnibus inter se concinentibus mundi partibus profecto non possent, nisi ea uno divino et continuato spiritu continerentur* (Cic. *De Nat. Deor.* II, 7, 19).

The Stoics, who regarded the universe as an animal, used to speculate as to the seat of its soul, i.e. as to the centre whence the active forces radiated and extended throughout the world. Most of them placed the *ἡγεμονικόν* in the higher regions, in the ether. Cleanthes held that it was in the sun (Cic. *Acad.* II, 41, 126). The human soul is a fragment of the universal soul, and is to the organism what God is to the world; for it extends throughout the body, and maintains all its elements in a state of mutual sympathy.

The relations of the soul to the body sufficed to prove that the former is corporeal, since only a body can act upon a body. Thus the union of soul and body was explained by a physical mixture. The soul was a *πνεῦμα*, a fiery breath, fed by the vapours of the blood, as the stars are fed by vapours of the earth. The seat of the soul is not in the brain but in the heart; for does not the air we breathe penetrate into our chest? Does not speech, that first manifestation of thought, proceed from the chest? In generation a part of the soul of the parents is transmitted to the embryo, which, as long as it is in the womb, has only a vegetable soul. It is after birth, and under the action of the external air, that, by a sort of condensation, the animal soul is formed (Plut. *De Stoic. repugn.* 41, 1, 8). The seven parts of the soul (the five senses, faculty of

speech, and the reproductive faculty) extend throughout the body, starting from the *ἡγεμονικόν*, that is, from the central and higher force, like the arms of a polypus (Plut. *De Plac. Ph.* IV, 4, 2).

To the Epicureans, as to the Stoics, the reciprocal action of the body and the soul was a sufficient proof of the corporeality of the latter (Lucr. III, 61 *sq.*). The soul was composed of fire, of air, of *pneuma*, and of a fourth more inobile, more subtle element, which was the principle of sensation (Lucr. III, 231 *sq.*). The irrational soul (*anima*) extended throughout the body, of which it was the vivifying force. The rational soul (*animus, mens*, Lucr.) is situated in the breast, and it alone possesses sensation and motion (D.L. x, 66). These two souls, although they constitute one and the same being, may yet not be both in the same condition, and hence the mind may be serene, whilst the animal soul is in pain.

Galen gives a definite form to the Physiology of the πνεῦμα; Functions of the Brain, the Marrow and the Nerves.

In the meantime, the physiological theory of the πνεῦμα was being developed on corresponding lines by physicians. For many centuries a school of medicine flourished at Alexandria, in which experiments and vivisection were practised, the nerves and the brain were studied, and discoveries were made which were to be revived in our days—for example, the distinction between the sensitive and motor nerves. Galen, the greatest of these physicians, adopted the theory of the πνεῦμα, but endeavoured to give it more unity and coherence. His theory was that the heart and the arteries receive air in the diastole of the pulse, and eject the air that has become impure, in the systole. The heart, which is the focus of the organic heat, provides the lungs with blood, and receives from the lungs and the arteries the πνεῦμα, which returns through the left ventricle of the heart into the arteries, and flows through the latter all over the body. Air when inhaled undergoes in the organism modifications which refine and subtilize it. In the lungs it mingles with the *pneuma* that is present at birth, πνεῦμα σύμφυτον; in the heart and in the arteries, and afterwards in the ventricles of the brain, it is elaborated and refined, and, in this way, it becomes the πνεῦμα ζωτικόν, the vital breath, in which

form it is found especially in the heart and arteries, and presides over the functions of the vegetable life (digestion and respiration). A psychical breath, which is more subtle still, is formed out of the *πνεῦμα ζωτικόν* in the ventricles of the brain.

As to whether this psychical *pneuma* is the soul itself or merely its highest organ, Galen deliberately abstains from giving an opinion. It was enough for his purpose that the *pneuma* was the necessary condition of life, and that the alterations in this vital breath were the cause of the diseases of the body, of disturbances of the soul, of death itself. But, if Galen does not affirm that the soul is material he draws attention to the connection between our physical and moral states. The faculties of the soul develop simultaneously with the organs of the body: the perfection of human thought can be traced to a happy blending of the elements which enter into the composition of the brain, and to the subtlety of the *pneuma* in man. The divers states of the soul depend on temperament, that is to say, on the proportions according to which are combined the corporeal elements, the principles of heat and cold, of dryness and humidity (*εὐκρασία—δυσκρασία*). Assuming that there is in the soul a higher spiritual part, the mortal part can be nothing else than this temperament, this combination of the organic principles. Do we not see how the union of the soul and body is severed by fever and poisons: how the character of nations is modified by differences in climate; and madness is produced by the presence of black bile in the brain?

After the time of Aristotle two opinions were current concerning the seat of the soul: the Peripatetics and the Stoics insisted that it was in the heart, while the physicians declared that it was in the brain. As against Aristotle, Galen cites the experiments made on living animals; vivisection, he says, proves that the principle of sensation, of speech, and of voluntary motion, is not the heart, but the brain. The heart is only the seat of the passions and involuntary movements; on the other hand, the principle of vegetable life is found in the liver. The spinal marrow serves to connect the brain with the nerves which are not directly joined to it; when a section of the spinal marrow is entirely cut off from the rest, in the part of the

body situated below that section sensation and motion disappear. The substance of the nerves is the same as that of the brain, but harder and thicker; they are the conductors of the *pneuma*, and transmit the motor impulses from the centre to the periphery, and sensations from the periphery to the centre. The nerves have three functions: through their connections with the organs of sense they produce sensation; being joined to the muscles they produce voluntary motion; and, finally, they develop in other organs consciousness of dangerous modifications.

Obscurity of the Neo-Platonic Doctrine concerning the Relation of Matter to Mind.

Plotinus returned to the Platonic conception of matter. Matter, for him, was not the body: it was without qualities, was the indeterminate, or Non-being. At the end of the Neo-Platonic procession, the soul, which is the third hypostasis, required something extended wherein it might develop, in order to disperse that which is concentrated in the world of ideas. The soul itself creates its own place: *πρoίέναι δὲ εἰ μέλλοι γεννῆσαι ἐαυτῇ τόπον, ὥστε καὶ σῶμα* (Enn. IV, 3, 9).

Plotinus does not succeed in explaining how it is that matter can proceed from the soul, Non-being come out of Being, or that which is in no way spiritual, out of the spiritual. The phenomenal world is the result of the union of the soul with matter; but how is this union to be conceived? As the image of Being in Non-being. The sensible world may be compared to the appearance of an object reflected in a mirror. Just as a face may be reproduced in several mirrors without losing its unity, so the soul and the intelligible form preserve their unity, and remain in themselves whole and entire, even when they seem to be divided and multiplied in sensible things. Matter, like Non-being, participates, and at the same time does not participate in Being. In the same way the soul is in matter and yet not in it, and is present in the multitude of sensible things without going out of itself, or ceasing to be immutable.

The individual soul, which is at first contained in the universal soul, yields to the desire of acquiring an independent life in a separate body. But in falling into this body it does not lose its purely spiritual nature, but remains united to the world-soul and to the *vous*. How is a living whole to be

formed out of this supra-sensible Being and the body? The soul, Plotinus replies, does not dwell in the body in the same way as the body dwells in space, nor as a part in the whole, but as the active force in its natural organ, as fire is present in the air and penetrates it without mixing with it. We must not say that the soul is in the body, but rather that the body is in the soul; because it is the latter which in its sphere of action contains the bodily organs.

The Fathers of the Church and the Scholastics.

The Apologists and the Fathers of the Church adopted in turn the different theories of the Greeks; even the Stoic Materialism had its partisans (e.g. in Tertullian). On the question of the origin of the soul there were two opposite doctrines: *creation* and *traduction*. According to the former, God creates the soul in a special act, and adds it to the body; on the latter theory the soul is produced by the parents like the body and in the same extent. Part of the *πνεῦμα* of the progenitors is transmitted in the act of generation.

St. Augustine, however, finds difficulties in both these theories and refuses to make any assertion on the subject. His conception of the relation of the soul to the body recalls those of the Neo-Platonists. The soul is a simple substance, and cannot be conceived as extended. It is, however, present all over the body, and it fills the latter, not *locali diffusione sed vitali intensione*; the soul is whole and entire in all the parts of the body and in each one of them, *in singulis tota et in omnibus tota* (*Epist.* 166, 2, 4).

According to these principles, the whole soul feels an impression made on any part of the body without requiring to move to the point where this impression is produced (*De Imm. An.* 16, 25). St. Augustine admits indeed that the union of soul and body cannot be scientifically explained—man is, as it were, a third substance formed out of two heterogeneous substances. He does not hold that the body acts on the soul; it is the soul, he says, which in the body acts on itself. It is not clear how on this hypothesis he could adopt Galen's view of the nerves and *πνεῦμα*, the brain and the heart, as intermediaries between the soul and the body.

In the Middle Ages, we find once more the theory of matter

and form: the traditions of Greek philosophy had not been broken. Aristotle did not explain how form, which is universal, can, out of matter that is completely indeterminate, make an individual being. The Scholastic Peripatetics, Albertus Magnus, and Thomas Aquinas, imagine they avoid this predicament by making matter itself the principle of individuation. *Principium diversitatis individuorum ejusdem speciei est divisio materiae secundum quantitatem* (*De Princip. Individ.* Fol. 297). But, if the individuality of man depends on the division of matter, on the distribution of its elements in space, and if the soul in itself is an immaterial form, would it not follow that the individuality of the human soul must be denied?

Duns Scotus, the antagonist of St. Thomas, denied that form was identical with the universal, and that matter was the principle of individuation. The individual, he said, is the *ultima realitas* (*In 2^m Sent. D. 3, 9, 6*). Individual existence is not a decadence but a perfection, for it presupposes the addition of positive determinations to the universal, and the general essence (*quidditas*) is completed by the individual nature (*haecceitas*). Furthermore, everything that is not God, even created spirits, consists of matter and form (*De Rec. Princ.* 9, 7). The matter which implies the existence of the human soul and of angels, is quite different from corporeal matter, by which is to be understood the matter immediately created by God, the universal basis of all finite existence, what Duns Scotus calls matter *primo prima* (*Ibid.* 9, 8).

Ockam, who at the beginning of the 14th century brought Nominalism once more into favour, refused to accept the theory that the vegetable and sensitive souls (*forma corporis*, *anima sensitiva*) were identical with the thinking soul, the *anima intellectiva*. The sensitive soul was extended and joined, so to speak, in a corporeal manner to the body, all parts of which it fills (*circumscriptive*). The thinking soul is another soul, a separable substance, which is united to the body in such a way that it exists whole and entire (*definitive*) in each of its parts.

"... Galen's theory of the psychical and animal *spiritus* in connection with the doctrine of the four humours and the temperaments was, very early in the middle ages, fused with the Aristotelian psychology. According to this doctrine, which may be found at full length even in Melancthon's psychology, the four fundamental humours

are prepared in the liver (the second organic process, after the first has taken place in the stomach); out of the noblest humour, the blood, the *spiritus vitalis* is prepared by a new process in the heart; and this is finally (the fourth and last process) in the cavities of the brain refined into the *spiritus animalis*. This theory probably owed the deep hold which it obtained chiefly to the fact that it seemed to superficial thought a sufficient bridging over of the gulf between the sensible and the super-sensible" (Lange's *Hist. of Materialism*, Eng. trans., Vol. I, p. 337).

"Here are Melanchthon's own words :

"Galen says of the human soul : 'These spirits are either the soul or an immediate instrument of the soul.' This is certainly true; and their brightness surpasses the brightness of the sun and of all the stars. What is most wonderful is that in godly men the divine Spirit itself mingles with these same spirits, and with His divine light makes them still more bright, so that their knowledge of God may be yet more luminous, their attachment to Him more solid, and their aspirations towards Him more ardent. But if devils dwell in the heart, they blow upon the spirits, and bringing the heart and the brain into confusion, interfere with judgment, give rise to open madness, and induce the heart and other members to commit the most cruel acts" (*Melanchthon*, quoted by Lange).

By the discovery of the circulation of the blood, which we owe to the genius of Harvey, the old physiology was entirely overturned. The theory of the *πνεῦμα* had been, as it were, its keystone, and this explains the opposition which was brought to bear on the new discovery. Descartes, enlightened by anatomical observations of his own, adopted the theories of Charles the First's physician, and invented a physiological theory which was entirely mechanical, but, at the same time, preserved something of the doctrine of Galen. His doctrine of animal spirits may be regarded as the form in which the old theory of the *πνεῦμα*, which dated from the earliest Greek physicians, appeared for the last time. The blood flows in the arteries as well as in the veins, but the more subtle parts of the blood which are elaborated in the heart ascend continually towards the brain, and serve to explain the reciprocal action of body and soul.

Descartes : Antithesis between Extension and Thought ; Union and Reciprocal Action of Body and Soul.

For Descartes the essence of matter is extension, because extension is the only thing in body of which we have a clear

and distinct idea, and without which we are unable to conceive it (*Princ.* II, 4). The living body is a marvellous machine, and animals are automata, without feeling or will. Descartes was a determined opponent of animism.

"Men have thought without any reason that our natural heat and all the movements of our body depend on the soul. The body of a living man is as different from that of one who is dead as a watch or any other automaton (that is to say, any other machine that moves of itself) when it is wound up and has within itself the material principles of the movements for which it has been made and is provided with everything necessary for its action, and the same watch or other machine when it is broken and the principle of its motion has ceased to act" (*Pass.* a. 5 and 6).

Thus the body is something finished, a complete thing, an automatic machine, the springs of which require no impulse from without. As a body, man is an automaton like any other animal, and, so far, everything in the universe can be explained mechanically. But in man there appears something entirely new, namely, thought. Body and thought have nothing in common, how then are we to conceive the union and the relations of these two heterogeneous substances?

Descartes does not attempt to explain the union of soul and body by any metaphysical hypothesis; he merely accepts it, and states it as a fact. Our notion of thought is rendered clear through metaphysics and that of the extended through mathematics; but "in order to know what the union of the soul and body is, one must live and refrain from speculation" (*Letter to Princess Elizabeth*, Cousin's Ed. Vol. IX, pp. 123-129).

"That the mind, which is incorporeal, is able to move the body, we know neither by reasoning nor by any comparison with other things; nevertheless, we cannot doubt it, since we are too clearly informed of it by experiences which are too certain and too evident. And we must keep in mind that this is one of the things that are known by themselves, and that we render these more obscure whenever we try to explain them by other things" (*Ibid.* IX, 161).

The union of soul and body is then *ad genericis*; in order to understand it we must proceed neither from the notion of extension nor from that of thought, but from life itself, and from the notions which correspond to this union (such as hunger, thirst, pain, etc.). This union is of the closest kind. Descartes goes so far as to say that the body is substantially

(*substantiellement*) united to the soul (*Réponse au quatrième objection*). The mind is distinct from the body, just as the arm is distinct from the whole body; that is to say, although strictly speaking it can be separated from the body, it forms part of the whole.

"I had after this described the reasonable soul, and shown that it could by no means be educed from the power of matter . . . but that it must be expressly created; and that it is not sufficient that it be lodged in the human body exactly like a pilot in a ship, unless perhaps to move its members, but that it is necessary for it to be joined and united more closely to the body, in order to have sensations and appetites similar to ours, and thus constitute a real man" (*Discourse on Method*, Part V, translated by Veitch). "Nature, likewise, teaches us by these sensations of pain, hunger, thirst, etc., that I am not only lodged in my body as a pilot in a vessel, but that I am besides so intimately conjoined, and, as it were, intermixed with it that my mind and body compose a certain unity. For if this were not the case, I should not feel pain when my body is hurt, seeing I am merely a thinking thing, but should perceive the wound by the understanding alone, just as a pilot perceives by sight when any part of his vessel is damaged" (*Méditation*, VI).

This being the manner in which soul and body are united, how does the reciprocal action between them take place? The soul is joined to the whole of the body, but has its principal seat and performs its functions more particularly in the small pineal gland, towards which the animal spirits unceasingly ascend.

"This small gland, which is the principal seat of the soul, is suspended between the cavities containing these spirits, in such a manner that it can be moved by them in as many different ways as there are sensible differences in objects; and at the same time it can be moved in divers ways by the soul, which is of such a nature that it receives as many different impressions within itself, or, in other words, has as many different perceptions, as there are different movements of the gland; and conversely, the bodily machine being so constituted that, by the very fact of this gland being moved in divers ways by the soul or by any other cause, it impels the surrounding spirits towards the pores of the brain, through which they are conducted by the nerves into the muscles, by means of which the soul causes them to move our limbs" (*Pass.* a. 54).

Thus Descartes holds that the soul can act directly on the body. No doubt the soul cannot increase or diminish the

quantity of motion in the body, since this quantity is constant, but it can by its will alone change the direction of the motion of the animal spirits and modify their course. Descartes is, however, in spite of himself, brought by his own dualism near to the doctrine of occasional causes and of pre-established harmony. Why has the soul as many different perceptions as there are different movements in the pineal gland?

Because these movements are given by nature for the purpose of making the soul feel them, because they give it the occasion to feel (*Dioptrique*, Vol. V, pp. 54-100).^{*} "The spirits, merely by entering the pores, excite a particular movement in the gland, which is instituted by nature, that the soul may feel this passion" (*Pass.* a. 36).

Similarly, in his explanation of this action of the soul on the body, Descartes is led to a kind of *Occasionalism*; it is always by acting on itself and on its own ideas that the soul acts on the body.

"The passions cannot be directly excited or removed by the action of our will; but they can indirectly, through the representation of those things which are usually joined with the passions we wish to have and which are contrary to those we wish to reject" (*Pass.* a. 45). "Although each movement of the gland appears to have been joined by nature to each one of our thoughts since the beginning of our life, it is nevertheless possible, through habit, to join them to other thoughts" (a. 50). "And such is the connection between soul and body that when we have once joined a certain bodily act to a certain thought, the one will in future never occur without the other" (a. 136).

Malebranche: Intercommunication of Matter and Mind; Theory of Occasional Causes.

On the question of the union of the soul and the body, Malebranche separates himself from Descartes. He denies any direct and reciprocal action between the two substances, and will admit only a correspondence between their phenomena. This theory of the union of the soul and the body is, however, a corollary of his general theory of the intercommunication of substances, and is only comprehensible through it. If, he says, we were to accept the existence in nature of real powers, if we were to believe that the sun endows all things with movement and life, we should have to return to paganism, and we should have to adore these beneficent or terrible forces (*Rech. de la Vér.* VI, 2nd Part, c. iii).

"There is only one true cause, because there is only one true God. The nature or force of each thing is merely the will of God; natural causes are not real causes, but only *occasional* causes which determine the Author of nature to act in such or such a way, at such or such a conjunction" (*Ibid.*).

It is not the sun that makes the plants grow, but God, Who, on the occasion of the sun's radiance, of which He is the principle, determines according to universal laws all the movements that have for their effect the growth of plants.

A general proof of the impotency of created things may be given :

"There is a contradiction in the statement that one body can move another, nay, further, it is contradictory to say that you can move your own chair; nor is this all, it is contradictory to say that all the angels and devils together could stir a piece of straw. The proof of this is clear, for no power, however great we may imagine it to be, can surpass or even equal the power of God. Now it would be a contradiction if God were to will that a thing should be, without wishing it to exist in some place, and without, through the efficaciousness of His will, putting it in that place, *i.e.* without creating it there; therefore, no power can transport this chair to any place if God does not carry it there, nor set and fix it there where God does not fix it, unless God suits the efficaciousness of His actions to the inefficacious action of His creatures" (7^e *Entr. mét.* § 10). "There is nothing more easily moved than a sphere on a plane, but not all the forces imaginable can set it in motion unless God intervenes. For, once more, as long as God wills to create and keep this ball at a point A, or any other point you please—and it is a necessity for Him to put it in some place—no force can move it from that place. . . . The moving force of a body is therefore merely the efficacy of the Will of God" (7^e *Entr. mét.* § 11).

These general laws apply to all created things. If you analyse the notion of extension, you will not find in it the idea of a moving force. When a moving ball comes in contact with another ball and sets it in motion, it is God, Who on the occasion of the motion of the first ball, produces motion in the second. The noblest minds are in a similar state of impotence. They can know nothing, if God does not enlighten them; they can feel nothing, if God does not cause them to be affected. They are incapable of willing anything, if God does not move them towards the good in general, that is to say, towards Himself. *A fortiori*, mind and body, being heterogeneous substances, cannot act on one another.

"The body of itself cannot be united to mind, nor mind to body; there is no connection between them" (*Morale*, Part I, Ch. 10). "It is evident that a body, that what is extended and a purely passive substance, cannot by its own efficacy act on a mind, that is, on a being that is of a different and infinitely higher nature than itself" (4^e *Entr. mét.* § 11). "By yourself you are not able to move your arm, to change your situation, position, posture, or to cause the slightest change in the universe" (7^e *Entr. mét.* § 13).

How then can we explain the connection between the soul and the body, which experience reveals to us at every instant? Only one hypothesis is left to us, that of *Occasional Causes*. On the occurrence of a particular movement of the body God is prompted to produce a certain movement in the soul, and, conversely, a particular sensation or a particular thought will prompt God to produce in the body a certain movement: so that God does everything, is the sole active force.

"Since, as you see clearly, there can be no necessary relation or connection between the modifications in the brain and certain feelings of the soul, it is evident that we must fall back upon a power that is not to be found in either of these two" (4^e *Entr. mét.* § 8). "Thus it is clear that the union of the soul and the body consists of no other bond than the efficacy of the divine decrees, decrees which are immutable and which never fail in their effect" (*Ibid.* § 11). "God alone can move the animal spirits. He alone is able, and knows how to make them flow from the brain into the nerves and from the nerves into the muscles, all of which things are required to move the limbs. . . . God has willed that I should have certain feelings, certain emotions, when there were in my brain certain traces, certain disturbances of the animal spirits. In a word, He has willed and unceasingly wills that the modes of the mind and of the body should be reciprocal. Herein consists the union and the natural interdependence of the two parts of which we are composed" (7^e *Entr. mét.* § 13).

Spinoza: the Unity of Substance explains the Parallel Development of Extension and Thought.

The Cartesian dualism had made it very difficult to understand the substantial union and the reciprocal action of the soul and the body. Spinoza, like Malebranche, separated himself from Descartes.

"What does he understand, I ask, by the union of the mind and body? What clear and distinct conception has he of thought intimately connected with a small portion of matter? I wish that he had explained the union by its proximate cause. But he conceived

the mind to be so distinct from the body that he was able to assign no single cause of this union nor of the mind itself, but was obliged to have recourse to the cause of the whole universe, that is to say, to God. Again, I should like to know how many degrees of motion the mind can give to that pineal gland, and with how great a power the mind can hold it suspended. . . . Indeed, since there is no relation between the will and motion, so there is no comparison between the power or strength of the body and that of the mind, and consequently the strength of the body can never be determined by the strength of the mind" (*Ethic*, 5th Part, Preface).

By tracing to God and to the efficacy of His will everything that is real in the union of the soul and body, Malebranche had reduced this union to a mere appearance; but, like Descartes, he admitted the existence of no other soul besides the human soul. Spinoza, on the other hand, had not only to explain the union of extension and thought in man, but also the union of the Divine thought and extension in all that is. Since in his system there is only one single substance, there must be a correspondence between all the attributes of this substance, which are the divers expressions of one and the same existence. Therefore, to each mode of the divine extension there must correspond a mode of the divine thought; the order and connection of ideas is the same as the order and connection of things (*Eth.* II, Prop. VII.).

" . . . Substance thinking and substance extended are one and the same substance, which is now comprehended under this attribute, and now under that. Thus also, a mode of extension and the idea of that mode are one and the same thing expressed in two different ways. . . . For example, a circle existing in nature and the idea that is in God of an existing circle are one and the same thing, which are explained by different attributes; and, therefore, whether we think of nature under the attribute of extension, or under the attribute of thought, or under any attribute whatever, we shall discover one and the same order, or one and the same connection of causes; that is to say, in every case the same sequence of things" (*Ibid.* note).

It is, therefore, not only in the case of man that the problem of the relation of extension to thought arises. All bodies are modes of extension; each mode of extension corresponds so closely to a mode of thought that the two are in fact one and the same thing; therefore all bodies have life.

" . . . For those things which we have proved hitherto are altogether general, nor do they refer more to man than to other individuals, all of

which are animate, although in different degrees. For of everything there necessarily exists in God an idea of which He is the cause in the same way as the idea of the human body exists in Him. . . . We cannot, however, deny that ideas, like objects themselves, differ from one another, and that one is more excellent and contains more reality than another, just as the object of one idea is more excellent and contains more reality than another . . . in proportion as one body is better adapted than another to do and to suffer many things, in the same proportion will the mind at the same time be better adapted to perceive many things" (*Ibid.* Prop. XIII, note).

Just as the universal life is a development which is parallel and, in a certain sense, identical with that of the divine attributes, so is human life a development of the modes of extension which constitute the human body, parallel to the development of the modes of thought, which correspond to these modes of extension. Being, in fact, identical in substance, the mind and body must correspond throughout the course of life. There is no direct or reciprocal action between them; the mind develops in a sequence of thoughts without the co-operation of the body. "The soul is a spiritual automaton." The body develops in a sequence of movements without the co-operation of the mind; the body of the artist paints pictures and his mind has no part in the act (*Eth.* III, Prop. II, note). But between the two sequences there is a parallelism, a necessary harmony. The mind expresses by inadequate and confused thoughts all that takes place in its body, and is through its body related to the whole of the extended universe. We shall find the same conception in Leibnitz, who owed a great deal to Spinoza.

" . . . The mind and the body are one and the same thing, conceived at one time under the attribute of thought, and at another under that of extension. For this reason the order and concatenation of things is one whether nature be conceived under this or that attribute, and consequently the order of the actions and passions of our body is coincident in nature with the order of the actions and passions of the mind. . . . Although these things are so, and no ground for doubting remains, I scarcely believe, nevertheless, that, without a proof derived from experience, men will be induced calmly to weigh what has been said, so firmly are they persuaded that solely at the bidding of the mind the body moves or rests, and does a number of things which depend upon the will of the mind alone and upon the power of thought. For what the body can do no one has hitherto determined, that is to say, experience has taught us

hitherto what the body, without being determined by the mind, can do and what it cannot do from the laws of nature alone, in so far as nature is considered merely as corporeal . . . not to mention the fact that many things are observed in brutes which far surpass human sagacity, and that sleep-walkers in their sleep do very many things which they dare not do when awake ; all this showing that the body itself can do many things from the laws of its own nature alone, at which the mind belonging to that body is amazed" (*Ibid.*).

In short, there is, according to Spinoza, no connection between extension and thought, but there is a constant parallelism in the development of these two divine attributes, whose harmony is due to the unity of the substance which they reveal.

Leibnitz : Theory of Pre-established Harmony.

In his *New System of the Nature of Substances, and of the Communication between them*, Leibnitz tells us that it was the problem of the union of the soul and body that led him to consider the general problem of the intercommunication of substances.

"Having settled these things, I thought I had gained my haven, but when I set myself to meditate upon the union of soul and body I was, as it were, driven back into the deep sea. For I found no way of explaining how the body transmits anything to the soul or *vice versa*, nor how one substance can communicate with another created substance" (*New System*, Latta's trans. p. 311).

In accordance with his usual progressive method, Leibnitz gives a solution of this problem, by which we are led ever further from the external to the internal, from the compound to the simple, from appearance to being. Starting from Descartes' hypothesis of two heterogeneous substances, how are we to conceive their union and the relations between them?

"Suppose two clocks or two watches which perfectly keep time together (*s'accordent*). Now that may happen in three ways. The first way consists in the mutual influence of each clock upon the other ; the second, in the care of a man who looks after them ; the third, in their own accuracy. . . . Now put the soul and the body in place of the two clocks. Their agreement (*accord*) or sympathy will also arise in one of these three ways. The way of influence is that of the common philosophy, but as we cannot conceive material particles or immaterial species or qualities which can pass from one of these substances into the other, we are obliged

to give up this opinion. The way of assistance is that of the system of occasional causes; but I hold that this is to introduce *Deus ex machina* in a natural and ordinary matter, in which it is reasonable that God should intervene only in the way in which He supports (*concourt d*) all the other things of nature. Thus there remains only my hypothesis, that is to say, the way of the harmony pre-established by a contrivance of the Divine foresight, which has from the beginning formed each of these substances in so perfect, so regular, and accurate a manner that by merely following its own laws which were given to it when it came into being, each substance is yet in harmony with the other, just as if there were a mutual influence between them, or as if God were continually putting His hand upon them, in addition to His general support (concurrency)" (*Ibid.* p. 332).

Thus the soul and the body, regarded from this first point of view, are like two clocks, which, without acting one on the other, always point to the same hour and strike at the same time.

But this is only an external and superficial point of view, for it is in the nature and universal laws of Being that we must look for the reason of appearances. Pre-established harmony was for Leibnitz not only a theory of the union of soul and body; one might almost say that it contained his whole philosophy. As they are simple, substances cannot act on one another from without. "The monads have no windows through which anything could come in or go out" (*Monad.* § 7). On this hypothesis, which seems to break up being into an infinity of isolated individuals, how is the unity of the world as it appears to us, and the harmony between the phenomena which constitute it, to be explained?

"It is thus,—that God at first so created the soul, or any other real unity, that everything must arise in it from its own inner nature (*fonds*) with a perfect spontaneity as regards itself, and yet with a perfect conformity to things outside of it. . . . And accordingly, since each of these substances accurately represents the whole universe in its own way and from a certain point of view, and the perceptions or expressions of external things come into the soul at their appropriate time, in virtue of its own laws, as in a world by itself, and as if there existed nothing but God and the soul (to adopt the phrase of a certain person of high intellectual power, renowned for his piety), there will be a perfect agreement between all these substances, which will have the same result as would be observed if they had communication with one another by a transmission of species or of qualities, such as the mass of ordinary philosophers suppose" (*New System*). The true relation between them is an ideal influence, which

resembles in its effects a real influence, but is altogether internal. Thus each monad has within itself the principle of all its own development. Its perceptions come to it from itself alone, and the monad for Leibnitz, as for Spinoza, is a "spiritual automaton" (*New System*); but there is at the same time a pre-established harmony between its acts and the acts of all the other monads, and, in this way, the monad is "a perpetual living mirror of the universe" (*Monad.* § 56).

It is in these general laws that the explanation of the union of soul and body is to be found.

"Thus, although each created monad represents the whole universe, it represents more distinctly the body which specially pertains to it, and of which it is the entelechy" (*Ibid.* § 62). "These principles have given me a way of explaining naturally the union or rather the mutual agreement (*conformité*) of the soul and the organic body. The soul follows its own laws, and the body likewise follows its own laws; and they agree with each other in virtue of the pre-established harmony between all substances, since they are all representations of one and the same universe" (§ 78).

When Leibnitz says that the soul is united more especially to a particular body, he means that God, in ordering the sequence of the acts of the monad which constitutes the body, has had regard to the soul, and *vice versa*. In the same way, in order rightly to understand the reciprocal action between the soul and the body, we must bear in mind what Leibnitz really means by acting and suffering.

"A created thing is said to act outwardly in so far as it has perfection, and to suffer (or be passive, *passif*) in relation to another, in so far as it is imperfect. Thus activity (*action*) is attributed to a monad in so far as it has distinct perceptions, and passivity (*passion*) in so far as its perceptions are confused. And one created thing is more perfect than another in this, that there is found in the more perfect that which serves to explain *a priori* what takes place in the less perfect, and it is on this account that the former is said to act upon the latter. But in simple substances the influence of one monad upon another is only ideal, and it can have its effect only through the mediation of God, in so far as in the ideas of God any monad rightly claims that God in regulating the others from the beginning of things should have regard to it" (*Monad.* §§ 49, 50, 51).

The interaction between the soul and the body is thus, like their union, entirely ideal. The body is impelled to carry out the commands of the soul, in so far as the latter has distinct per-

ceptions, and the soul submits to be moved by the passions which arise out of bodily representations. In a word, the soul is a higher kind of monad, and the entelechy of the body. It is in this sense that in the soul is found the reason of the acts of the numberless monads which constitute the body, and of the harmony between them; again, the soul acts on the body, in so far as in the soul is found the reason of what takes place in the monads, which she ideally binds together. The body acts on the soul, in so far as in the body a reason for the modifications of the soul is found.

Conclusion: Since the Cartesian attempts Philosophers have endeavoured to avoid the Difficulty.

It may be said that, since the attempts made by the Cartesian school, philosophers have endeavoured to avoid rather than to solve the problem of the union of the soul and the body, as well as the more general problem of the intercommunication of substances. The doctrine of *physical influx*, which is sometimes attributed to Euler, but was really the traditional theory of the Schools, offers no solution of the problem. Physical influx merely means *natural influence*,¹ and this doctrine consists in accepting as a fact that two substances naturally re-act on one another, but it presents no hypothesis that would explain the *how* of this union.

Scientific men and phenomenologists of the school of Hume are

"From whatever point of view," says Euler, "we consider that close union between body and soul which constitutes the essence of a living man, it will always remain inexplicable by philosophy" (*Letter to a German Prince*, 2nd Part, I, 13).

¹ In this account of the different hypotheses offered in explanation of the union of soul and body, we have not thought it necessary to speak of the so-called theory of a *Plastic medium* which in some handbooks of Philosophy is (on the authority of Larmigière) ascribed to Cudworth, the well-known author of the *Systema intellectuale*. We have shown in our Latin thesis (*De Natura Plastica Apud Cudworthum*, 1848, translated into French 1860) that there is nothing of the kind in Cudworth. His *Plastic Nature* does not serve to explain the union of soul and body but the production of organisation and of life. It is a kind of instinct, a kind of plastic life in nature analogous to what is now called the Unconscious; and Cudworth uses it further as a world soul, which under God's commands is charged with the organizing of things, and is responsible for the irregularities and errors in nature. This semi-spiritual, semi-material principle could not (as was supposed) have been employed as an explanation of the union of soul and body. It is a hypothesis as puerile as it is contradictory.

content to state that we cannot lay hold of the connection between a bodily modification and a state of consciousness, and that, consequently, we have before us two series of irreducible phenomena. In Tyndall's words :

"Were our minds and senses so expanded, strengthened, and illuminated as to enable us to see and feel the very molecules of the brain, were we capable of following all their motions, all their groupings, all their electric discharges—if, such there be, and were we intimately acquainted with the corresponding states of thought and feeling, we should be as far as ever from the solution of the problem : how are these physical processes connected with the facts of consciousness? The chasm between the two classes of phenomena would still remain intellectually impassable."

Kant regards it as one of the advantages of his *Critique of Pure Reason* that it relieves us of the insoluble problem of the union of soul and body. Something of the Cartesian dualism yet remains in his theory : the underlying substance of things is neither matter nor mind, but an unknown thing-in-itself; which is revealed to us in body and thought under the different forms of space and time. The Materialists and the Idealists were both equally wrong: we do not perceive mind immediately as a substance, much less as the substance of all things; mind is not a mode or a phenomenon of matter, there is no way of passing from the one to another. Body and thought are two different phenomena; it is possible that the thing-in-itself is a single substance, which under the form of space is body, and under the form of time is thought. Although we cannot escape from this antithesis of the two orders of phenomena, we are delivered by the *Critique* from an insoluble problem.

"The difficulty which lies in the execution of this task consists, as is well known, in the presupposed heterogeneity of the object of the internal sense (the soul) and the objects of the external senses, inasmuch as the formal condition of the intuition of the one is time, and of that of the other space also. But if we consider that both kinds of objects do not differ internally, but only in so far as the one appears externally to the other—consequently that what lies at the basis of phenomena, as a thing-in-itself, may not be heterogeneous, this difficulty disappears. There then remains no other difficulty than is to be found in the question—how a community of substances is possible; a question which lies out of the region of psychology, and which the reader, after what in our analytic has been said of primitive forces and faculties, will easily judge to be also beyond the region of human cognition" (*Critique of Pure Reason*, Transc. Dialectic, Bk. II, Ch. I).

For Fichte there is only one substance, the infinite Ego. On the other hand, Schelling's Absolute is the identity of subject and object, of the real and the ideal.

"Nature not only in herself, as being the integral and absolute act of the divine manifestation, but also in her visible existence, is essentially one, and contains no inner diversity. In all things Nature is the same life, the same power, the same fusion through ideas. In Nature there is no pure corporeal existence, but everywhere souls symbolically transformed into body. . . . Psychology rests on the hypothesis of the antithesis between soul and body, and it is easy to imagine what may come of inquiries into what does not exist, namely, a soul in opposition to the body. Any true science of man must be sought in the essential and absolute unity of soul and body, that is, in the idea of man, and consequently not in general in the real and empirical man, who is merely a relative manifestation of the former. . . . A true science of Nature must start from the identity of soul and body in all existence; so that between physics and psychology no real antithesis should be conceived to exist" (*Vorlesungen über die Methode des Akademischen Studiums*, VI and XI).

Materialists affirm the identity of matter and force: "there is no matter without force, they say, and no force without matter," but they do not trouble themselves to define either matter or force, nor the *how* of their union. The Spiritualists who still uphold the Cartesian dualism, regard the union of the two heterogeneous substances, mind and body, as a fact which experience compels us to accept, and which science is incapable of explaining.

It would seem, however, that there is a growing tendency to admit that substance is one, after the manner either of Leibnitz or of Spinoza, and in this way to avoid the insoluble problem of the union of soul and body. But at the same time, we must remark that it is not much easier to understand how two substances of the same nature can act on one another. As Cuvier observes, the communication of motion appears to us to be adequately explained, only because we are accustomed to find it everywhere. It would seem as if, in accordance with Schelling's conception, the interaction between all the individuals which make up the universe can, in the last resort, be comprehensible only through the hypothesis of the unity of the principles of which they are the manifestation. The drawback to this hypothesis is, that in explaining the unity of things it imperils their individuality.

PART IV

THEODICY OR NATURAL THEOLOGY

CHAPTER I

THE RELIGIOUS PROBLEM IN ANCIENT TIMES AND IN THE MIDDLE AGES

It may be said that, broadly speaking, all philosophy grew out of mythology: but this is especially true of that branch of philosophy which deals with the questions of the existence and the attributes of God. It is evident that these problems arose out of reflections suggested to the human mind by the popular beliefs which lie at the root of every religion. Logically, then, the history of religion should have preceded the history of philosophy; but we shall not go so far back; we shall merely give a brief account of the earliest religious conceptions of the Greeks, as far as they can be discovered through the works of their earliest poets, through the *Theogony* of Hesiod and the poems of Homer.

Greek Theology: The Poets; Hesiod and Homer.

Hesiod taught that the world came out of chaos through the operation of Love.

"... Foremost sprang Chaos and next broad-bosomed Earth ever secure seat of all Immortals . . . and dark dim Tartarus in a recess of Earth having broad ways, and Love who is most beautiful among immortal gods, Love that relaxes the limbs. . . . But from Chaos were born Erebus and black Night, and from Night again sprang forth Aether and Day, whom she bare after having conceived by union with Erebus in love" (*Theog.* 116 *et seq.*).

We find the same theogony in the myth of the birds related by Aristophanes in his comedy of that name (*Birds*,

V, 191). This appears to have been the most ancient form of Greek theology, and it corresponds to a certain extent with what we can learn of the theology of the Phoenicians from the testimony of Sanchuniathon (Philo Byblius *ap.* Eusebius, *Praepar. Evang.* I, c, VI). It is, as we see, a kind of pantheistic naturalism, in which everything comes out of chaos, through the operation of forces which lay dominant within it and by which it is transformed.

In Homer's theology we find quite a different tone and a different spirit. This pantheistic and naturalistic cosmogony becomes an anthropomorphism that is not far removed from theism. Jupiter is the supreme ruler (*ὑπάτος μῆστωρ*), who arranges and directs all things; all the forces of the universe are subject to his authority. In the highest place in the empire of the gods, Jupiter stands alone as the ideal of supreme power and absolute intelligence. He presides over the assemblies of the gods, and he holds communion with man. He is the father of Ate, who leads the guilty astray; of Remorse, by which offences are wiped out; of Pity, the avenger of the oppressed. He is the protector of the rights on which rest the relations between men, the supreme God of oaths and of the family. He watches over the habitations of men, is the patron of guests and suppliants, and even of beggars (see Jules Girard, *Du Sentiment religieux chez les Grecs*, pp. 71, 72).

Notwithstanding the many noble thoughts which are to be found in the poetry of Homer and Hesiod, the religion of the Greeks never rose much above mythology, and never became exactly what we call a religion. For the marks of a religion are three: firstly, a revealer; secondly, a sacred book; thirdly, a system of metaphysics and of ethics. The Greeks had no revealer: no man ever professed to be or was accepted among them as a sacred and privileged intermediary between God and man; they had no Manu, no Zoroaster, no Buddha. Nor had they any sacred book such as the *Zend-Avesta*, or the *Vedas*, or the *Koran*. Lastly, they had no theology, that is, no metaphysical and moral doctrine evolved by a learned priesthood and regarded as above the private judgment of individuals. In Greece the poets were the theologians. To them alone was due the development of the religious and moral ideas implied in the popular beliefs. Some attempts at religious organization were,

however, made, and these give us an idea of what the Greek religion might have become. Such were the mysteries of Orpheus and, one might even add, the Pythagorean Brotherhood. (See Jules Girard.) All these attempts, however, led to nothing, and the Greek religion remained a religion of the imagination, in which philosophers and poets took the place of metaphysicians and moralists.

Let us now see how the religious notions of the poets were developed through philosophy.

The Cosmogony of the First Greek Philosophers: The Ionic School; Xenophanes: Criticism of Polytheism; Pantheism of Xenophanes; Religious Scepticism; The Sophists.

Before it grew into a theology, the earliest Greek philosophic system, that of the Ionic school, was a cosmogony; and it may be regarded as the translation into an abstract and scientific form of the mythological cosmogony. Aristotle traces the doctrine of Thales, who derived everything from water, to the ancient myth, according to which Ocean is "the father of Gods and men" (Arist. *Metaph.* I, 3). But the cosmogony of Thales, though apparently materialistic, was inspired by a pantheistical conception. He said that all things were full of God, *πάντα πλήρη θεῶν* (Arist. *De Anima*, I, 5). He also thought the loadstone had a soul (Arist. I, 2, 405 a, 19).

The first thinker who raised the conception of God to a philosophic plane, whether by combating popular superstitions or by defining the peculiar marks and attributes of Divinity, was Xenophanes, the founder of the Eleatic school. Xenophanes ridicules the polytheistic anthropomorphism. Men, he says, make gods in their own image.

"Negroes imagine them as black and with flattened noses; the Thracians, with blue eyes and red hair; if oxen and horses could paint, they would represent their gods as horses and oxen" (Xenoph. *Frag.* 6 and 7; Cic. *De Nat. Deor.* I, 24).

Homer and Hesiod represent the Gods as committing all the acts that are considered most disgraceful in men, such as theft and adultery (Cic. *De Nat. Deor.* I, 24).

Xenophanes gave, according to Aristotle (*De Xenoph.* 3), an *a priori* proof of the unity of God: "If God is the most

powerful of beings, He must be One; for if He were two or several, He would not be the most powerful, since in that case He could not accomplish His will in all things"; and he proved the eternity of God in the same way. Finally, he ascribes to Him the highest of all attributes, namely, intelligence: "Without effort," he says, "He directs all things by the omnipotence of mind; ἀπάνευθε πόνονίον νόον φρενὶ πάντα κραδαίνει" (*Frag.* 3). It may, however, be questioned whether these words are to be understood in a theistical or pantheistical sense (see V. Cousin, *Frag. philosophiques*, art. Xenophane). Aristotle tells us that it was while contemplating the whole heaven that Xenophanes reached the conception of the Divine unity: εἰς τὸν ὅλον οὐρανὸν ἀποβλέψας (*Metaph.* I, 5); and it would seem also that it is to the whole universe that the following lofty conception applies: "Whole and entire He sees, conceives, and hears: Οὐλος ὁρᾷ, οὐλος δὲ νοεῖ, οὐλος δὲ τ' ἀκούει" (*Frag.* 2).

Thus, it was not Xenophanes but Anaxagoras who first separated mind from matter, and saw in Intelligence the source of all things. This we gather from the following passage in Aristotle:

"For of the excellent and beautiful order of some things, and of the production of others of the entities, it is not natural to assign, perhaps, either earth or anything of this kind as a cause . . . nor was it seemly, on the other hand, to attribute so important a part to chance and fortune. Now, whosoever affirmed mind, as in animals, so also in nature, to be the cause of the system of the world, and of the entire harmony of it, the same appeared, as it were, of sober temperament, in comparison with the vain theorists of earlier ages (οἷον νήφων ἐφάνη παρ' εἰκῇ λέγοντας τοῖς πρότερον). Now, we know that Anaxagoras openly adopted these principles" (*Metaph.* I, 3).

The following are the fragments from Anaxagoras which we still possess, and which go to prove the above theory:

"In the beginning there was an infinite number of things, all mixed up together, then mind came and separated them and arranged them all in distinct order: ὁμοῦ πάντα χρήματα ἦν, Νοὺς πάντα διεκόσμησε"¹ (D.L. II, 6). "Mind is independent (αὐτοκράτης); is not mixed with anything else, is entire in itself, μόνος αὐτὸς ἐφ' ἑαυτοῦ ἐστι. Mind is

¹ The word *διεκόσμησε* signifies both the act of separating (*διᾶ*) and the act of putting order into things (*κοσμεῖν*).

the most subtle and the purest of things, τὸ λεπτότατον, τὸ καθαρώτατον" (*Frag.* 8). "It has a supreme power over all things: ἰσχύι μέγιστος πάντων νοῦς κρατεῖ." Lastly, "mind possesses unlimited knowledge: περὶ πάντος ἰσχύι, πάντα ἔγνω" (*Simplicius*, 271 a, 30).

With the Sophists, scepticism as regards religious matters appears for the first time. Protagoras said:

"I know nothing about the Gods, whether they are or are not. οὐθ' ὡς εἰσὶ, οὐθ' ὡς οὐκ εἰσὶ" (*D.L.* ix, 51). Thrasyarchus is supposed to have suggested doubts concerning Divine Providence. He said that the Gods did not trouble themselves about human affairs: οὔτι οἱ θεοὶ οὐχ ὁρῶσι τὰ ἀνθρώπινα.

Finally, to Critias, one of the thirty tyrants, and a pupil of the Sophists and of Socrates, a passage is attributed in which, like the philosophers of the eighteenth century, he ascribes the invention of the Gods to the law makers.

"In the beginning," he says, "men lived like animals, without law or order. Penal laws were established, but as the laws only reached crimes that were openly committed, a clever, ingenious man came forward, who, with a view to preventing hidden crimes, spoke of the immortal gods, and gave out that heaven was their dwelling-place" (*Sext. Emp. Adv. Math.* IX, 54).

Philosophic Theism: Socrates; Final Causes; Providence.

The irreligious tendency of the Sophists' teaching called forth a defender of the moral and religious conceptions of mankind. Although we have found, it is true, in previous thinkers the germs of philosophic theism, they were still so feeble and so vague that we are justified in regarding Socrates as its true founder, as the first philosopher who had the conception of a Divine Personality, and as the discoverer of that proof of the existence of God which was known in the Schools as the proof by final causes. We have in the speech of Socrates in Plato's *Phaedo*, and again in the conversation carried on between Socrates, Euthydemus and Aristodemus, as reported by Xenophon, the clearest statement of the above doctrines.

Like his predecessors, Socrates had at first occupied himself with physics and cosmogony, but he could not rest content with their explanation of things. Even Anaxagoras, who, indeed, introduced intelligence into his system but made no use of it, failed to satisfy him. For Socrates, on the contrary,

conceived the universe as the product of a moral cause, of a beneficent will. He said that phenomena came to be not because they must, but because it was good that they should exist. This is the substance of his speech in the *Phaedo* (96, 199). Xenophon gives a similar but more popular account of the doctrine of Socrates in the *Memorabilia*. There he points out to Aristodemus (*Mem.* I, 4) the happy combinations found in the human body, the 'harmonious concatenation of causes and effects, and of means and ends. In nature he finds not only traces of intelligence, but proofs of a beneficent power which watches over man (IV, 3). He believes in the constant presence and unerring action of this power in the universe. He believes that God observes the actions of men, and that He knows their secret thoughts and feelings.

Thus Socrates acknowledges the existence, not only of God, but of Providence, and not only of that universal Providence which watches over the whole world, but of a particular Providence which is interested in the fate of individuals. He recommends men to pray, and to pray only for the good of their souls, and not for temporal goods. Speaking from the philosophical point of view, we may say that it was Socrates who revealed the God of the West. Whilst, with the exception of Judea, the whole of the East adored nature under the name of God, and whilst the Greek religion was still no more than a religion of nature in an anthropomorphic form, Socrates was the first to make known the moral God, such as He has since been acknowledged and adored by all civilized nations.

Plato's Religious Doctrine: the Idea of the Good: the Life of God; Proofs of the Existence of God; Providence; The Existence of Evil; Optimism.

Plato gave to the conceptions of Socrates a fuller development and a more scientific form. It is with him that the history of the philosophy of religion really begins. Indeed, it might be said with truth that his whole philosophy, that is to say, his theory of Ideas, was nothing else than a theodicy.

What are we to understand by the term *Idea* (*ἰδέα, εἶδος*) in Plato's doctrine? It was the universal and essential element in all things, that which is fixed and permanent in them.

But the Idea is superior to individuals, not only in quantity as being the one in the many, but also in quality. It is not only the universal, it is also the ideal (see our *Essai sur la dialectique de Platon*, p. 249). No doubt these two points of view were often confounded by Plato, so that Aristotle was led to regard his theory as a tissue of abstractions, but the whole spirit of Plato's teaching contradicts this interpretation. For Plato, the measure of Being was not only the generality and extension of the concept, it was at the same time and more especially its perfection. For, among all the different Ideas, to which does Plato give the highest rank, and to which does he always unhesitatingly and with the most entire conviction ascribe existence? Is it not to the Ideas of what is most perfect, the Ideas of the Just, the Fair, and the Good?

- " . . . There is an absolute beauty and goodness, an absolute essence of all things. . . . For there is nothing which, to my mind, is so patent as that beauty, goodness . . . have a most real and absolute existence" (*Phaedo*, 77).

In a word, all the Ideas Plato here discusses have the characteristics of existence, and are regarded by him as being beyond all doubt, and, although he places them in a lower rank, it is the same with the mathematical notions, equality, number and measure, all that constitutes the principle of order and harmony in sensible things. Finally, but with some hesitation, Plato teaches the existence of the Ideas of sensible things, that is to say, the essential principle of each genus and each species, such as the Idea of man (*Karm.* 130), the Idea of fire (*Tim.* 51 c), and even the Idea of the sensible world in general, which he calls τὸ αὐτόζωον.

But, can it be that these ideal types, these bases of the visible and sensible reality, are, as has been asserted, merely modes without substance, or do they not rather themselves depend upon a higher Idea, which is no other than the Idea of God? On this point Plato's own words are decisive. It is impossible to separate the Ideas from God. For does not Plato say in the *Republic*, "All intelligible beings derive their being and their essence from the good, τὸ εἶναι καὶ τὴν οὐσίαν ὑπ' ἐκείνου αὐτοῖς προσεῖναι" (*Rep.* 509 b). And does not this mean that all the

Ideas have their substance in the Idea of the Good, which is, in fact, God Himself? This we also infer from another passage in the *Republic*:

"In the world of knowledge the Idea of Good appears last of all, and is seen only with an effort; and when seen is also referred to the universal author of all things beautiful and right, parent of light and of the lord of light in this visible world, and the immediate source of reason and truth in the intellectual" (*Rep.* VII, 517 a).

Can it be said that what Plato calls the Idea of the Good is not God Himself? What, then, is it? What principle, other than God, could be the source of truth and of intelligence, the cause of all that is beautiful and good in things?

"This [the Idea of Good] you will deem to be the cause of science and of truth . . . beautiful, too, as are both truth and knowledge, you will be right in esteeming this other nature as more beautiful than either . . . science and truth may be like the Good, but they are not the Good; true Good has a place of honour yet higher" (*Rep.* VI, 508 e).

Again, it is this same principle that, according to Plato, is the object, not only of dialectic, but of love. Love pursues the Beautiful, as science pursues the True, and virtue the Good. Love rises from the body to the spirit, from beauty of form to beauty of feeling, from beauty of feeling to beauty of knowledge, until it reaches the Beautiful as it is in itself.

"But what," says Diotima of Mantinea to Socrates, in the *Symposium*, "what if man had eyes to see the true beauty—the divine beauty, I mean, —pure and clear and unalloyed, not clogged with the pollutions of mortality and all the colours and vanities of human life—thither looking, and holding converse with the true beauty, simple and divine?" (*Symp.* 210 sqq.).

And this God, this supreme term of dialectic and of love, is not a logical entity without consciousness and without personality, but a living God.

"And, O Heavens," says Plato in the *Sophist*, "can we ever be made to believe that motion and life and soul and mind are not present with perfect being? Can we imagine that being is devoid of life and mind, and exists in awful unmeaningness, an everlasting fixture" (*Sophist*, 249 r).

Plato, while he ascends to God spontaneously in the upward movement of dialectic and of love, at the same time endeavours

to establish His existence by arguments; and, with him, begins the history of what are called the proofs of the existence of God.

1stly. *The proof by efficient cause.*—All that is born, or comes into being, necessarily proceeds from some cause. The cause is the same as that which produces. That which produces precedes, and the thing produced follows (*Phil.* 7). There exists, therefore, a power capable of causing things to become other than they were before (*Sophist*, 205 b).

2ndly. *What is in the effect exists ideally in the cause.*

"Soc. May our body be said to have a soul?—Pro. Clearly.—Soc. And whence comes that soul, my dear Protarchus, unless the body of the universe, which contains elements like those in our bodies, but in every way fairer, had also a soul? . . . and wisdom and mind cannot exist without soul . . . and in the divine nature of Zeus would you not say that there is the soul and the mind of a king, because there is in him the power of the cause?" (*Phil.* 30).

3rdly. *Proof from the motor cause.*—Plato, forestalling Aristotle, gave a proof of the existence of God by motion, which is the subject of a lengthy demonstration in the 10th book of the *Laws*. It is true that, in this passage, he speaks of the world-soul, rather than of God, but this world-soul was created by God.

There are two kinds of motion; "there is a motion able to move other things, but not to move itself," and there is a motion that "can move itself as well as other things." The substance that can move itself is, therefore, the cause of motion in substances that cannot move themselves. The soul is, then, prior to the body, and, consequently, its "character, and manners, and wishes, and reasonings, and true opinions, and reflections, and recollections are prior to length, and breadth, and strength of bodies." Plato finds further proof in the celestial order and harmony, "If, my friend, we say that the whole path and movement of heaven, and of all that is therein, is by nature akin to the movement, and revolution, and calculation of mind, and proceeds by kindred laws, then, as is plain, we must say that the best soul takes care of the world, and guides it along the good path" (*Laws* X).

4thly. *Proof by final causes.*—Plato was a faithful follower of the Socratic tradition. We cannot say whether it is Socrates himself, or Plato in the name of Socrates, who opposes the method of final causes to that of physical causes. It is certain, however, that this well-known passage in the *Phaedo*

expresses a doctrine which they held in common. Socrates laughs at those who explain the universe by air, water, aether, etc.:

"I might compare him to a person who began by maintaining generally that mind is the cause of the actions of Socrates, but who, when he endeavoured to explain the causes of my several actions in detail, went on to show that I sit here because my body is made up of bones and muscles; and that as the bones, as he would say, are hard, I have joints which divide them, and the muscles are elastic and they cover the bones, etc. . . . and he would have a similar explanation of my talking to you, which he would attribute to sound, and air, and hearing, and he would assign a thousand other causes of the same sort, forgetting to mention the true cause, which is that the Athenians have thought fit to condemn me, and accordingly I have thought it better and more right to remain here and undergo my sentence" (*Phaedo*, 989 *sqq.*). . . . "The second and co-operative causes . . . are thought by most men not to be the second but the prime causes of all things, because they freeze and heat, contract and dilate, and the like; but they are not so, for they are incapable of reason or intellect. . . . The lover of intellect and knowledge ought to explore causes of intelligent nature first of all, and, secondly, of those things which, being moved by others, are impelled to move others" (*Tim.* 46).

Plato says elsewhere that "the intelligence is of the same family as the cause." "Let us remember, then, that the intelligence has affinity with the cause, and is of the same kind." Further, the intelligence is the same as the truth. It is the lover of measure and proportion; it is what has most affinity with the Good (*Phil.* 65 *a*).

From these principles, Plato deduces a *teleological* theory, which (if it is not intended to be partly mythical) appears to us arbitrary and somewhat childish, but which may nevertheless be regarded as the first attempt at what has been called in modern times *physical theology*. Thus he tells us that:

"God placed water and air in the mean between fire and earth . . . and for these reasons . . . the body of the world was created, and it was harmonized by proportion, and therefore has the spirit of friendship" (*Tim.* 32). "He made the world in the form of a globe . . . the most perfect and the most like itself of all figures; for he considered that the like is infinitely fairer than the unlike" (*Ibid.* 33). Sight is given to us "to the end that we might behold the courses of the intelligence in the heavens and that we might imitate the absolutely unerring causes of good and regulate our vagaries." The same may be affirmed of speech and hearing, which are meant to "correct any discord which may have arisen

in the courses of the soul, and to be our ally in bringing her into harmony and agreement with herself. The body was provided as its vehicle and means of locomotion" (*Ibid.* 44).

For Plato, the existence of God implied Divine Providence, since the attributes of God can scarcely be separated from His existence. If, however, we follow this division, which is the one accepted in modern works on the nature of God, the question arises, what was Plato's view of the metaphysical and moral attributes of the Divinity? (see Fouillée, IX, Ch. vi). God is one; for He is not such or such a good, but the Good. He is simple, not because He possesses one single quality, but because He possesses them all. He is immutable, for the more perfect a being is, the less it is subject to change. He is eternal, for past and future are only fleeting forms of being; one thing only can be said of the eternal substance: that it is. As for the moral attributes of God, they are all implied in His very definition, namely, that He is the Good. God created the world because He was good.

"Let me tell you, then, why the Creator made this world of generation. He was good, and the good can never have any jealousy of anything. And being free from jealousy He desired that all things should be as like Himself as they could be" (*Tim.* 29 a).

The result of this view is a theory of optimism, according to which, evil must be an accident in the universe, and has no reality, no effective existence.

"Now the deeds of the best could never be, or have been, other than the fairest; and the Creator, reflecting on the things which are by nature visible, found that no unintelligent nature taken as a whole was fairer than an intelligent taken as a whole; and that intelligence could not be present in anything which was devoid of soul. For which reason He put intelligence in soul and soul in body that He might be the Creator of a work which was by nature fairest and best" (*Tim.* 30).

We find the same doctrine in the 10th book of the *Laws*. "He (the king) contrived so to place each of the parts that their position might in the easiest and best manner procure the victory of good and the defeat of evil in the whole" (*Laws*, X, 904).

Not only did God's goodness preside over the origin of the universe, it also follows the world in its development, and

continues to watch over it, and to protect it, even in the smallest details, and may therefore be called Providence. °

"Let us not, then, deem God inferior to human workmen, who, in proportion to their skill, finish and perfect their works, small as well as great, by one and the same art; or that God, the wisest of beings, who is both willing and able to take care, is like a lazy good-for-nothing, or a coward who turns his back upon labour and gives no thought to smaller and easier matters, but to the great only" (*Laws*, 902).

Thus regarded, the objection of the existence of evil disappears; what we have to consider is the whole, and not its parts.

"And one of these portions of the universe is thine own, unhappy man, which, however little, contributes to the whole; and you do not seem to be aware that this, and every other creation, is for the sake of the whole, and that you are created for the sake of the whole, and not the whole for the sake of you. For every physician, and every skilled artist, does all things for the sake of the whole, directs his efforts towards the common good, executing the part for the sake of the whole, and not the whole for the sake of the part. And you are annoyed because you are ignorant how what is best for you happens to you and to the universe, as far as the laws of the common creation admit" (*Laws*, 903).

Thus we see how strong is the resemblance between Plato's theological conceptions and those of Christianity. This resemblance was so striking that some of the Fathers of the Church thought he must have had access to the Scriptures, but this theory is very improbable and is now no longer accepted by anyone. Plato merely developed the thoughts of Socrates, who is, as we have said, the true founder of philosophic theism. But while we recognize the analogy between the Platonic and Christian philosophies, we must, however, notice an essential difference in them, namely, that the God of Plato is not a God who creates, but a God who is an architect, an organizer, a *demiurgus* who manipulates a necessary and pre-existing matter: we shall return to this point when we come to Christian theodicy.

The Theology of Aristotle: The Potential and the Actual; Pure Actuality; The Thought of Thought; The Argument of a First Mover.

It may be said that Aristotle's theodicy is substantially the same as Plato's; but Aristotle goes deeper into the subject, and

treats it with more scientific rigour. They both place the essence of God in the perfection of being; and both identify the supreme reality with the supreme ideal. But, whereas Plato never clearly distinguished the *ideal* from the *universal*, and thus left room for the supposition that he placed the highest perfection in the highest degree of universality, Aristotle, on the other hand, was impressed with the idea that perfection is proportionate to determination, and that the highest perfection is contained in the highest determination.

Again, while Plato rises up to God by means of a dialectic, which carried him from one degree in the Ideas to another (sensible, mathematical, and absolute Ideas), Aristotle reaches the notion of God by the *ascent of nature*, which from stage to stage, from form to form, from type to type, travels over the whole scale of perfections. In a word, Plato's formula is: *the One and the Many* (τὸ ἓν καὶ τὰ πολλά); and that of Aristotle is *matter and form*, or, more particularly, *potentiality and actuality* (ὑλη, μορφή; δύναμις, ἐνέργεια).

Aristotle arrived at the distinction between potentiality and actuality by his analysis of motion and change. In every being that changes there is implied two elements: in the first place, the capacity of change, of assuming such and such a character, of becoming *this* or the *other*; secondly, the realization of this capacity, the acquisition of this character, the very fact of having become this or that. On one side, we have the acorn which is capable of becoming an oak, the child who will become a man; on the other, we have the oak itself, man realized. Thus, its form or actuality is the very essence of a being, that which constitutes it, determines and distinguishes it from other things. The form of the marble when in the hands of the sculptor is Hercules or Apollo; that of a plant is to live; of an animal, to feel; of man, to think. Potentiality aspires after actuality.

This movement of potentiality towards actuality is *desire*, and desire is the universal law of nature. Every being desires the degree of perfection which it is capable of attaining, the degree of reality of which it is susceptible; in other words, its own actuality. Actuality is therefore the *end* to which it aspires (τὸ οὐ ἐνεκα). This end is identical with the good, for the good of each being is to realize its own potentiality, to pass from

potentiality to actuality; and, therefore, the supremely perfect being must be the being whose whole potentiality has been converted into actuality. Nature is a vast workshop, in which each being is working towards this transformation, and endeavouring to destroy in itself what is imperfect, incomplete, and indeterminate, in order to increase the amount of actuality of which it is capable: and above nature is that pure, immutable actuality which does not require to pass from potentiality to actuality since it is already all actuality, all reality, and all perfection.

"But here," says Aristotle, "a difficulty arises, for it would seem that what energizes must subsist entirely in a state of potentiality; but that everything that is endowed with capacity does not always energize. Wherefore we may assume that potentiality is a thing that is antecedent to energy. But surely, if this be the case, no one of the entities would be in existence; for it is possible that a thing possesses a capacity of existence and yet not be in existence. And whether we share the opinions of the theologians, who are for generating all things out of night, or of the natural philosophers, who say that all things came into being simultaneously, there is the same impossibility. For how can matter be put in motion if nothing that subsists in energy is a cause? for the matter of a house, at least, will not move itself, but the builder's art will; nor does the earth move itself, but the seeds. Thus we see that motion must have a cause, and also that the primary principle is superior as a cause, otherwise we should be obliged to say that all things came out of night or chaos or non-being" (*Metaph.* XII, 1071 b, 22). "Nor does he form his opinions correctly who would assimilate the first principle of the universe to the principle belonging to animals and plants, saying that from things that are indefinite and unfinished there arise always things that are more perfect. . . . For . . . the first principles are perfect from which these objects derive their origin; man begets man" (*Metaph.* XIV, Ch. V). "Those, however, who adopt the supposition (such as the Pythagoreans and Speusippus), that what is best and most fair is not to be found in the principle of things, from the fact that though the first principles both of the plants and animals are causes, yet that what is fair and perfect resides in created things as results from these—persons, I say, who entertain these sentiments do not form their opinions correctly. For seed arises from other natures that are antecedent and perfect, and seed is not the first thing, whereas that which is perfect is; as, for example, the man is antecedent to the seed." (*Metaph.* XII, 1072 b, 30).

Thus it is a fundamental principle with Aristotle, and one which *Metaphysics* owes to him, that the perfect does not come from the imperfect, but the imperfect from the perfect.

Mythology had always made the world come out of Night, and the principle of love (*ἔρως*) appears suddenly without any reason; whereas it is love that came before Night, the active before the passive principle, form before matter, actuality before potentiality.

In Aristotle's philosophy, there are, then, two ultimate principles. On the one hand, the matter that is nothing but matter, and on the other, the form that is nothing but form. The former, the *materia prima* (*πρώτη ὕλη*), is a pure abstraction, and is all potentiality without any admixture of actuality. The latter is altogether actuality without any potentiality; it is pure actuality, God.

It is impossible to form any conception of this *materia prima*, which of itself is nothing, has no form, no determination, and which yet is something, since, in its successive transformations, it constitutes the substance of the world; but the ancient philosophers never succeeded in getting rid of this notion of a *materia prima* and of the dualism which results from it; and yet this matter is nothing in itself; all that it is, all that it becomes, any order and harmony and any beauty it possesses, is due to the action of God, that is to say, to the pure actuality, to the absolute perfection.

What is the mode of operation of the pure actuality on matter? How does it produce motion? As we have already said, through desire (*ὄρεξις*). The pure form does not act directly on matter, like Plato's *demiurgus*, but only in its character of final cause, of the supremely desirable.

"This is the way it imparts motion—that which is desirable and that which is intelligible impart motion, whereas they are not moved themselves. But the originals of these are the same; for the object of a desire is that which appears fair, and a thing which is originally selected from volition actually is fair. Now we desire a thing because it appears fair, rather than that a thing appears fair because we desire it. . . . Both that which is fair and that which is desirable for its own sake belong to the same co-ordinate series, and that which is first is always the most excellent. . . . Now that which first imparts motion, does so as a thing that is loved. . . . From a principle, then, of this kind . . . hath depended (*ἤρτηται*) the Heaven and Nature" (*Met.* XII, 1072 a, 25).

But this principle upon which the whole of nature depends, and which moves it by means of desire—what is it in itself?

Evidently it must be that which is the best in itself, and for Aristotle what is best in itself is thought.

"Now, essential thought is the thought of that which is essentially the most excellent . . . the mind thinks itself . . . becomes an object of thought by contact, and by an act of intellectual apprehension. So that the mind, and that which is an object of thought for the mind are the same; for the faculty of perceiving the intelligible, or substance, is what constitutes mind, and the actuality of the mind is the possession of the intelligible. It is a Divine prerogative which the mind appears to possess, and which seems to belong to the First Mover rather than to the mind of man; and contemplation constitutes what is most agreeable and pleasant. If, therefore, God possesses eternally this felicity which we only know for a short period, the Divine Nature is admirable; and if He possesses it, in a more eminent degree, still more admirable will be the Divine Nature. Now, His happiness is in effect greater than ours. In Him is the principle of life, for the energy or active exercise of mind constitutes life, and God is this activity, and essential activity belongs to God as His best and everlasting life. Now, our statement is this,—that the Deity is an animal that is everlasting and most excellent in nature; so that with the Deity life and duration are uninterrupted and eternal; for this is the very essence of God." (*Ibid.* XII, 7).

If God is intelligence, and if life is thought—what does He think? What are the objects of the intelligence?

"For if He thought of nothing but was like one who sleeps, where, I ask, would be the dignity of such a condition?" On the other hand, the object of Divine thought cannot be inferior things, for "it would be better not to see some things than to see them." Moreover, if the object of thought were something different from itself, the mind would be subordinate to this external object, which would consequently be more excellent than itself. Thus it is evident that God cannot think anything else than Himself. And what is He Himself? As we have seen, He is thought; therefore, in thinking Himself, He thinks thought, and this is, in fact, His true definition: He is "the thought of thought, *ἐστιν ἡ νόησις νοήσεως νόησις*" (XII, 9).

This formula appears at first to be either contradictory or tautologous, but it becomes explicable if we regard thought as having two aspects, an objective and a subjective; on the one hand, thought is the intelligible, and on the other, it is intelligence. It is the identity of the intelligible and intelligence; this is what Aristotle means by the thought of thought.

We have considered it necessary to dwell upon this great theological system of Aristotle, which was, and still may be said to be, the basis of every theodicy, in spite of the additions made to it by modern philosophy. But besides this vast synthesis of speculations, in which God is, as it were, the result of an entire system, the Thought which inspires and animates, and, at the same time, comprehends the whole, we must also draw attention to the fact that to Aristotle we owe the first complete and scientific proof of the existence of God, that known in the schools by the name of the *Proof of the First Mover*. This proof was implied in the preceding, but Aristotle gave it special treatment and development in the eighth book of his *Physics*, which is entirely taken up with it. As summed up by M. Ravaisson (*Essai sur la Métaph.* I, 459), this proof runs as follows:

- "Everything that is in motion is moved, either by something else, or by itself. Let us suppose the former to be the case. Given these three terms: the thing that is moved, the mover, and the medium by which the mover moves the thing moved: τὸ κινούμενον, τὸ κινούν, καὶ τὸ ᾧ κινεῖ. The medium is a mover, since it sets the thing moved in motion; but it is also a movable body, since it only communicates motion; therefore, the medium is only a middle term. Now, between the movable body and the mover, there cannot be an infinite number of middle terms, for the series of causes cannot be infinite; therefore, by following the series of *media* we must arrive at a term which is not moved by any other.* The first characteristic of the first mover is, therefore, that it is immovable, at least with regard to anything else but itself. If, therefore, the first mover were in motion, it could only be set in motion by itself. But a thing that moves itself cannot do so entirely, in the same instant, and in the same manner, for motion is given and received in the same indivisible point of time. If, therefore, a thing moved itself entirely, one thing would be giving and receiving, acting and suffering the same thing at the same time, and there would be two contradictories existing at one time and at the same instant. The thing moved is in a state of potentiality; the mover is actual and cannot, therefore, be at the same moment and in the same sense both potential and actual. Thus, a thing that moves itself must consist of something that moves and something that is moved, and each of these two elements cannot be at one time the thing moved and at another time the thing that moves the other, for this would be a circle. Therefore, the mover as mover must itself necessarily be immovable. Consequently there are three kinds of movers: Firstly, the mover that imparts motion and is moved (natural things); secondly, the mover.

that is movable in itself, but immovable with regard to the rest (the fixed star, the first heaven); lastly, the mover that is immovable, both with regard to itself, and with regard to all other things, and this is God. The absolutely immovable mover only moves things by the intermediary of the relatively immovable mover, the first heaven, and this it is that moves the rest of the world."

Such is the celebrated proof from the First Mover.* It may have changed in form in the schools, but nevertheless it remains in substance a valid proof, since the truth remains that motion does not suffice to itself, otherwise it would devour itself as in the theory of Heraclitus, and that its cause must lie in some other being which does not move.

Stoic Theology: Materialistic Pantheism; The Argument of Universal Assent; Final Causes; The Difficulty of the Existence of Evil; Doctrine of the ἐπιγεννήματα. Piety of the Stoics.

The Stoic theology, as compared with that of Plato and Aristotle, gives evidence at once of progress and of retrogression. It was inferior in this sense, that Plato and Aristotle placed the Divine above the universe, higher than nature, and that Metaphysics with them was distinct from Physics, whilst with the Stoics Metaphysics is reduced to Physics: God is identified with Nature. But, on the other hand, their theology was an improvement, in that, leaving aside this confusion, the various theological questions were treated much more fully and more accurately by the Stoics than by any of their predecessors. Most of the conceptions which we find in modern works on the metaphysics of religion (e.g. in Fénelon's *Existence of God*, and the *Theodicy* of Leibnitz) are in direct descent from the Stoic doctrine.

For the Stoics, Nature herself is God: *Quid aliud est natura quam Deus?* (Senec. *De Benefic.* IV, 7); *Vis Deum naturam vocare? non peccabis* (*Quaest. Natur.* II, 45); *Tanquam natura sit Deus mundo permixtus* (Lactant, *Div. Instit.* VII, 3). The God of the Stoics is not, like the God of Aristotle, the immovable mover. He is Himself the *primum mobile* (τὸ πρῶτον κινητόν).

God is a soul, a spirit, which pervades the whole world, and fills every part of it: πνεῦμα διὰ πάντων διεληλυθός (Origen, *Cont. Cels.* VI, 71). He is, as Heraclitus said, fire, that is to

say, the true cause of motion, but He is also an organizing fire which proceeds methodically to production: *πῦρ τεχνικὸν ὁδῶ βαδίζον εἰς γέγενεν* (D.L. VII, 156). The Stoic doctrine was thus a Pantheism, or, to be more precise, a Cosmotheism, that is to say, a doctrine which deifies the world. It was, moreover, a Materialistic Pantheism, for the Stoics said that all things are body, and that nothing exists except bodies.

This doctrine of the Stoics shows us how Metaphysics had degenerated since the time of Aristotle, and yet it is true that we find in the works of the school not only a remarkable development of the proofs of the existence of God and of Providence, but also in some of them (e.g. Cleanthes, Epictetus, Marcus Aurelius) evidences of a religious feeling of the most elevated kind.

The Stoics appear to have been the first to make use of the argument of universal assent, or at least to recognize its full worth. All men, all nations, says Cicero, agree in acknowledging the existence of the Gods. It is a feeling innate in man: *Omnibus innatum et in animo quasi insculptum esse Deos* (*De Nat. Deor.* II, 5). The Stoics also gave a fuller development to the proof of final causes and of the order of nature. It was they who pointed out the chief facts upon which this argument rests, and they were also guilty of many of the exaggerations with which it has been reproached. The strongest of the proofs given by Cleanthes, says Cicero, is, that of the ordered movement of the heavens, the distinctness, variety, and beauty of the arrangement of the sun, the moon, and all the stars. One need only look at the heavens to see that they were not produced by chance: *Quarum rerum aspectus satis indicat non esse ea fortuita* (*De Nat. Deor.* II, 5). It is the Stoics who appear to have invented also the argument that if the twenty-four letters of the alphabet were thrown at random upon the ground they could not fall into such order as to form the *Annals of Ennius* (*De Nat. Deor.* II, 37). Again, it was they who discovered the examples which have been so often used to prove that what has order must be the product of intelligence.

"As when we enter a house or school or court, and observe the exact order and discipline and method of it, we cannot suppose that it is so regulated without a cause, but must conclude that there is someone who

commands and to whom obedience is paid ; it is impossible for us to avoid thinking that the wonderful motions, revolutions, and order of those many great bodies, no part of which is impaired by the infinite succession of ages, must be governed by some superior intelligent being" (*Ibid.* II, (h. V).

They cited, too, the principle that 'what is most perfect cannot come out of the less perfect, that if a whole has no feeling, the parts cannot have any feeling either.

" . . . If the plane tree could produce harmonious lutes, surely you would infer that music was embalmed in the plane tree. Why, then, should we not believe that the world is a living and wise being, since it produces living and wise beings out of itself?" (*Ibid.* II, 8).

It is true that this reasoning is applied to the divinity of the world and not to the existence of a God distinct from it, but it was none the less the origin of that celebrated argument of Montesquieu: "What could be more absurd than to suppose that a blind fate could have produced intelligent beings!" (*Esprit des Lois*, I, 1).

The same arguments served the Stoics to prove the Providence as well as the existence of God, who is the *divina providentia* (*πρόνοια*) (see *De Nat. Deor.* II, 29, 38). For said they, "His first care is to provide so that the world may persist as long as possible." *Providit ut mundus sit aptissimus ad permanendum*, and the strongest proof of this divine action is again to be found in the order which exists in nature and in particular in final causes.

" . . . As the case is made for the buckler, and the scabbard for the sword, so all things, except the universe, were made for the sake of something else. As for instance, all those crops and fruits which the earth produces were made for the sake of animals, and animals for man; as the horse for carrying, the ox for the plough. . . . But man himself was born to contemplate and imitate the world" (*Ibid.* II, 14).

Like Fénelon later they reviewed all parts of the universe (*Ibid.* II, 39 *et seq.*): the earth with all its beauties, the sea in its immensity, the numberless species of animals, the heavens and their wonders, the plants with their exquisitely ordered parts.

" . . . They have roots to sustain their stems. . . . They are clothed with a rind of bark to secure them more thoroughly from heat or cold. . . . The animals are covered, some with hides, some with fleeces,

some with bristles, some with feathers. . . . All their interior parts are so framed and so disposed that there is nothing superfluous" (II, 47).

They likewise dwelt on the marvellous operations of instinct, as for example the case of the tortoises, who scarce are born but that they of themselves go to seek the water they require. They mentioned details similar to those which are given in treatises on Natural Theology in the 18th century (Cic. *De Nat. Deor.* II, 49). They argued also from the faculty of reproduction and from the precautions which nature has taken to ensure the nourishment and the preservation of the young, and cite with admiration the wonders of maternal love. Finally, it was they who first developed a thesis which has since been much criticised, but in which there is nevertheless some truth, namely, that everything was made for man, and that he is one of the chief ends of nature; for, they said, everything was made for man and the gods, and certainly not for plants and animals. *Ita fit credibile deorum et hominum causa factum esse mundum, quaeque in eo sunt omnia* (*De Nat. Deor.* II, 62 et seq.).

But, like all philosophers, the Stoics could not avoid seeing that there was a formidable objection to their vindication of the ways of Providence, the objection, that is, of the existence of evil. And, here again, they were the first, if not to state the objection (for Plato had already done so), at least to suggest a means of solving it; and their solution is still accepted in philosophy. Chryssipus attempted to justify Providence in a work entitled: *That there is nothing to find fault with or to blame in the universe?* περὶ τοῦ μηδὲν ἐγκλητον εἶναι μηδὲ μεμπτὸν ἐν τῷ κόσμῳ (Plut. *De Repug. Stoic.* 37, 1). He maintained that natural evil was only an accident and had only supervened subsequently, *ex consecutione, κατὰ παρακολούθησιν per quasdam sequelas* (Aulus Gellius, *Noctes Atticae*, VII, 1, 7). Marcus Aurelius (VI, 36) said similarly that evils were ἐπιγεννήματα τῶν σεμνῶν καὶ καλῶν; sort of excrescences of good and evil:

"It was not," said the Stoics, "nature's intention that men should be subject to diseases, but while creating a large number of things beautiful or useful, it was found that a certain number were attached to them. *Alia simul agnata incommoda*" (Aulus Gellius, *Ibid.*).

This is very much what Leibnitz says when he affirms that God permitted evil not by an *antecedent* volition, but by a *consequent* volition.

Notwithstanding their Pantheism, it is among the Stoics that we find the most beautiful examples of religious feeling and true piety in antiquity. As an example of this, nothing could be finer than the *Hymn* of Cleanthes to Zeus

"In this Hymn Zeus is addressed as highest of the gods, having many names, always omnipotent . . . governing all things by law. 'Thee,' continues the poet, 'it is lawful for all mortals to address, for we are thy offspring and alone of all living creatures possess a voice which is the image of reason. Therefore, I will forever sing thee and celebrate thy power, etc.'" (*The Ancient Stoics*, by Sir Alex. Grant. *Oxford Essays*, 1858).

With the later Stoics, as for example Epictetus and Marcus Aurelius, this piety appears in a form that touches us even more, and comes near to the highest religious feeling:

"Deal with me, Lord, according to Thy will. . . . I am resigned to Thy laws and Thy will is my will. In all things I will praise Thy works and Thy benefits. . . . If my daily good should fail me I shall know that my General commands me to sound the retreat. Him will I obey; Him will I follow; His will I shall approve and praise, for when I came here it was because He willed it; I have glorified His name, for such was my function towards myself, towards each man and all men."

The Alexandrian Theology: The Three Hypostases; The Doctrine of Procession; Descent and Return; Ecstasy.

The Stoic school had identified God with life or the *world-soul*; Aristotle had defined God by intelligence, and placed Him above the world; Plotinus, the founder of the last great Greek school, the Neo-Platonic or Alexandrian school, combined and adopted the conceptions of both the Stoics and Aristotle, but above them all, he set a principle borrowed from Plato, that of the One who is higher than intelligence and higher than the soul. Thus the school of Alexandria accepted a threefold God, a God composed of three principles or *hypostases*; in a word, a *Trinity*. But there is a fundamental difference between their Trinity and the Christian Trinity. In the latter the three persons (who are also called in Greek *hypostases*) are equal to one another, and form one, and the same God in three

Persons. In the Alexandrian Trinity the hypostases are not equal; there is a fall, a descent from the One to Mind, from Mind to Soul. God is one, indeed, but He is composed of different elements which represent a progressive diminution in His excellence. In the Christian doctrine God is; in the Alexandrian doctrine God radiates and develops, not in the sense of the less perfect becoming more perfect, but in an inverse sense, in an unbroken descent from absolute excellence to the lowest degree of being.

The Neo-Platonic principle of divine development is thus the principle of procession (*πρόοδος*), or of the descent from higher to lower principles; but the essential characteristic of this procession is that the higher principle flows into the lower without losing anything of its own essence.

"God does not, as the Stoics said, pass into things. He does not give them part of Himself, He communicates Himself to them, and, at the same time, He Himself preserves His original integrity. What comes from God is not the result of separation, but of extension. He gives, for instance, knowledge, which may be communicated without being exhausted, which is used by him who receives it, without leaving Him who gives it, the torch which kindles another without losing its own light. It is characteristic of spiritual existence that it can be communicated without being diminished. In short, Neo-Platonism has a threefold basis: the theory of the three divine principles or archical hypostases; the One, the Intelligence, the Soul,—three principles which are connected with one another by the conception of incorporeal communication. Of these three principles, the lowest, or world-soul, is God as the Stoics had conceived Him. The second, Intelligence, is the God of Aristotle; finally, the supreme principle, the One, is the God of Plato. Here we have the three principles of the three great doctrines of Greek philosophy, in the self-same order as that in which these principles succeed each other in history" (Ravaisson, *Essai sur la Mét. d'Aristote*, Vol. II, p. 382).

In short, three hypostases, each of which is to the one below it what unity is to multiplicity, and the highest of which is the One itself, the absolute One; hypostases which are so connected that each stands to the one that follows in the same relation as a centre to its radii; a divine centre, which is multiplied, in a manner, in its radii, but, at the same time, never ceases to remain whole in itself—such is the general plan of the doctrine of Plotinus (*Ibid.* p. 420).

This doctrine is a form of Pantheism, for Plotinus accepts no existence except that of God; but it is not a Pantheism in which God is absorbed in the world, since each principle, while it develops downward, remains in itself unalterable. Thus, the soul remains distinct from the body, although it is the essence of the body; the universal soul remains distinct from individual souls, although the latter are merely emanations of the former. In the same way, Intelligence does not become identical with the Soul, nor the Soul with Intelligence.

This being the case, in what sense is the Alexandrian doctrine a Pantheism? In this, that in it God evolves naturally, and not by His own will. For, to suppose that the procession of the highest principle was the effect of will, and not of nature, would be to suppose the existence in God of desire, and hence of deficiency; and how could perfection itself lack anything? In the second place, will implies motion, but the One is immovable, therefore it is not by a free act of will that the first principle gives birth to the second, but by its very essence (*Enneads*, III, ii, 2). So an odorous substance sheds its perfume; so fire emits heat, and the snow cold; so the sun sends forth rays of light, and the cup being too full overflows (*Enneads*, V, i, 6; ii, 1—see Ravaisson, p. 434).

Just as all things come from the One, so do all things return to it. Descent and return are the two laws of the divine movement. This double movement explains everything and is itself the alternation of expansion and concentration, from absolute unity to infinite multiplicity and from multiplicity to unity. This return to the divine is brought about in the soul by unification with God (*ένωσις*); by ecstasy (*έκστασις*), that is to say, by its being transported out of self and absorbed in God.

This, then, was the end of ancient theology. Having started from a world that was the All, it reached a God Who was the All. From the Cosmic Pantheism of the Ionics it rose to the Idealistic Pantheism of Plato, and then, returned to the Stoic Hylozoism, only to become finally engulfed in the Mystical Pantheism of Plotinus. Now it was that Christian theology, boldly separating God from the world in the doctrine of the creation *ex nihilo*, gave Him an immutable place above nature,

and allowing no necessary existence to nature, assigned God's will and freedom as the cause of the development of the universe which the Alexandrians had ascribed to the Divine essence and to the nature of things.

The Religious Problem in the Middle Ages.

Mediaeval philosophy sprang from two sources: on the one hand, the philosophy of Aristotle; on the other hand, Christian philosophy, whose chief representative is St. Augustine. Christian philosophy in its turn consists of two elements—Platonism and Christianity. The groundwork of Christian theodicy is borrowed from Plato, but two new doctrines were added—the doctrine of Creation and of the Trinity.

St. Augustine: Analogy between Platonism and Christianity; Features Peculiar to Christian Theology; The Trinity and the Creation ex nihilo.

We shall begin by pointing out the points of resemblance between St. Augustine and Plato (see Émile Saisset, *Intr. to the Cité de Dieu*). (1) The world is the result of God's goodness. Plato said, "Being free from jealousy He desired that all things should be as like Himself as they could be." St. Augustine quotes in the same sense the text in Genesis—"God saw that it was good." "God made all things by his word, and he made them because they were good" (*Civ. Dei*, IX, 20). (2) To St. Augustine as to Plato, time is an image of eternity: "All Thy years, O Lord, are but as one day," and according to Plato also, "God makes of eternity, which rests in unity, that eternal but divisible image, which we call time." (3) Plato taught that time and the world were created at the same time. So also St. Augustine: "It cannot be denied that time itself was created." (4) Plato as well as St. Augustine considers that evil is merely the negation of good, and that it disappears entirely when things are regarded as a whole (*Civ. Dei*, XI, xxii; XII, iv). (5) Both hold the supreme Good to be the imitation of God. "Let all philosophers yield to the Platonists who teach that happiness lies not in the pleasures of body or mind, but in the enjoyment of God" (*Civ. Dei*, VIII viii). (6) The theory of expiation, in which happiness is connected with virtue, and misery with vice, is also common to

both philosophers. Evil came from man, God foreseeing it, permitted it, and by His Providence turns evil into good (Plato, *Laws*, Bk. X; St. Aug. *Civ. Dei*, XII, vi; V, i and x; VIII).*

These are the principles common to Platonism and Christian Philosophy; let us now see in what they differ. *

Firstly the creation *ex nihilo*. At the dawn of Greek Philosophy, the world was first considered as existing of itself. Philosophers began to look about for the material principle out of which it was evolved (water, air, fire). Then a distinction was made between matter and a motor principle (love and hate). Next an organizing principle was invented (the *νοῦς* of Anaxagoras).

With Socrates and Plato the principle of intelligence became more and more distinct from matter, and with Aristotle is entirely separated from it. Matter, however, continued to exist conjointly with the organizing principle; but this matter became less and less significant. Instead of being chaos or a complete mixture of all corporeal substances, it was now no more than the passive principle of the universe, the purely potential, the indefinite, indeterminate, τὸ ἀόριστον. Plato had even called it the Non-being, and appeared sometimes to identify it with space, or the void. To arrive at the doctrine of creation, it only remained to make of this relative Non-being an absolute Non-being, in fact to make it disappear. The God of the *Timæus* was still a *demiurgus*, or a God who was *architect* or *organizer*; the Christian God is a creating God. "How didst Thou make heaven and earth?" says St. Augustine, ". . . it was not as a human worker fashioning body from body . . . nor didst Thou hold anything in Thy hand wherewith to make heaven and earth. For whence couldst Thou have what Thou hadst not made whereof to make anything? Therefore Thou didst speak and they were made, and in Thy Word Thou madest these things" (*Conf.* XI, v).

And as God creates the world out of nothing, so also did He create it directly and without intermediate agents. On this point St. Augustine separates himself from Plato, who in the *Timæus* relates that the world was created by secondary gods, under the direction of the sovereign God, as if it were beneath His dignity to put His own hand to the task. The gods and the angels are not the creators of animals any more

than the labourers are the creators of the crops and the trees (*De Civ. Dei*, XII, xxiii). Finally, God creates out of goodness and munificence, and not because He has need of creatures. Before He created things He wanted nothing, and in creating them He added nothing to His nature.*

"What, therefore, could there be wanting unto Thy good, which Thou Thyself art, although these things had never been . . . the which Thou madest not out of any want, but out of the plenitude of Thy goodness? . . . For to Thee, being perfect, their imperfection is displeasing, and therefore were they perfected by Thee, and were pleasing unto Thee; but not as if Thou wert imperfect, and wert to be perfected in their perfection" (*Confessions*, XIII, iv).

The theory of creation involves a serious difficulty. Since God is eternal and immutable, His acts must be eternal and immutable, and it would seem to follow that the creation must have existed from all eternity; but does not a creation that is eternal appear to contradict the very idea of creation? On the other hand, does not creation in time appear to presuppose the existence in God of two wills, one by which He did not create the world, and the other by which He did? Furthermore, in the indefinite series of centuries, why should He have created the world at one time rather than at another, and what was God doing before He created? To these objections St. Augustine replies by boldly propounding a new theory—that of the creation of time.

"Although we believe that at the beginning of time God made heaven and earth, we must nevertheless know that before the beginning of time there was no time. . . . For God is also the maker of all times. . . . For how could there be a time that was not made by God, since He Himself is the maker of all time? And if time began to be with heaven and earth we cannot find a time when God had not yet made heaven and earth. . . . Time is not eternal as God is eternal" (*De Genesi, contra Manichaeos*, I, ii). "Who can fail to perceive that time would not be unless there were some created things whose successive movements, which could not exist simultaneously, make intervals of different lengths? And this is what constitutes time. . . . Now before the world was, there can have been no time, because there was then no created thing by whose movements time could have been measured. Therefore the world was created with time since motion was created with the world" (*De Civ. Dei*, XI, vi).

The second doctrine peculiar to Christian theodicy is that of

the Trinity. No doubt the Trinity is a mystery and a dogma, and as such belongs rather to theology proper, but the Fathers of the Church and St. Augustine himself frequently made use of philosophical and metaphysical considerations in order to facilitate the comprehension of this mysterious dogma. Thus St. Augustine finds an image of the Trinity in all created things, and especially in the human soul.

"All the created things which divine art has produced manifest in themselves a certain unity, and form, and order. For every created thing has a kind of unity, so bodies have their nature and the soul has spirit; every created thing, moreover, adapts itself to a certain form, so bodies adapt themselves to figures and qualities, and souls, to sciences and arts; and thus it is that we find in bodies weight and situation, and in souls love and joy. There is no nature, no substance, but we see in it at once these three things: first, that it is; secondly, that it is in such or such a manner; thirdly, that it exists inasmuch as God is in it. The first quality manifests the very cause of nature whence all things spring; the second manifests the form according to which all things are disposed and organized; the third manifests a permanence in the bosom of which all things dwell. Now, being comes from the Father; form from the Son; and permanence from the Holy Ghost."

In the soul these three qualities are revealed in another form, but are still an image of the Trinity.

"I could wish that men would consider these three things that are in themselves. These three are far other than the Trinity; but I speak of things in which the many exercise and prove themselves, and feel how far other they be. But the three things I speak of are, to Be, to Know, and to Will. For I Am, I Know, and I Will; I Am Knowing and Willing; and I Know myself to Be and to Will; and I Will to Be and to Know. In these three, therefore, let him who can see how inseparable a life there is,—even one life, one mind, and one essence; finally, how inseparable is the distinction, and yet it is a distinction" (*Conf. XIII, xi*).

This mediaeval theodicy was formed, then, out of some elements which were not new, since they were derived from Aristotle and Plato, and other elements, which were furnished principally by St. Augustine. We shall, as is usual in treatises on natural theology, divide the subject into two parts: firstly, the proofs of the existence of God; secondly, the nature of God; and we shall trace the history of these two questions separately.

Proofs of the Existence of God given in the Middle Ages: "Via Eminentiae"; "Via Ascetatis"; A Priori Argument or the Argument of St. Anselm; Objections made by Gaunilo.

In the Middle Ages the proofs of the existence of God were classed under two heads, and the methods employed reduced to two, the first of which was called the *via eminentiae*, and the second, the *via ascetatis*. The first method consists in reasoning from the evidences of perfection to be found in the world to absolute perfection. This was a semi-empirical method. In the second, the essence of God Himself was made the starting point whence His existence was inferred, and this was a purely rational or *a priori* method. These two proofs were presented in their most perfect and impressive form by the celebrated Anselm of Canterbury, who borrowed the first from Plato, but was himself the author of the second.

"Even as what is just is so only through the presence of justice, so what is good is so only because of the presence of goodness. Now, who can doubt that that through which things are good is the Supreme Good? It is, therefore, necessary that there exists a Being supremely great and supremely good, that is to say the *summum* of all existing things, *maximum et optimum, id est summum omnium quae sunt*" (*Monologium*, ch. I).

The same idea is more precisely expressed by Albertus Magnus and Thomas Aquinas (*Compend. Theologic. Verit.* c. 1).

"All creatures," says Albertus, "cry out to us that there is a God; for the beauties of the world bear witness to a supreme beauty, its sweets to a supreme sweetness, what is highest in it to something higher than all, what is pure to purity itself. *Pulchrum pulcherrimum, dulcia dulcissimum, sublimia altissimum, pura purissimum.*"

Aquinas dwells on the fact of comparison and degrees in things, and shows that, for this comparison to be possible, there must be an absolute as unit of measure.

"Things," he says, "are good, and true, and noble in a greater or lesser degree. But that they have more or less can only be said of things according as they are nearer or further from something that is absolute. There exists, therefore, some Being which is in regard to all things the cause of their beauty and perfection, and this is what we call God" (*Summa Theolog.* I, q. 2).

Again, Alexander of Hales says: "If there were no Sovereign Good, no Absolute Good, there might still be black and white,

but there would be no such thing as good" (*Summa Theolog.* I, q. 3, a. 9).

These conceptions were all derived from Plato through the medium of St. Augustine, but there is a celebrated proof which belongs peculiarly to the Middle Ages, the so-called *a priori* proof of the existence of God, or the Ontological argument.

In the construction of this argument which bears his name, St. Anselm sets out from the idea that in order to prove the existence of God to atheists, one must meet them on a common ground, that is, one must start from a principle which is accepted on all sides. This principle is the mere conception of God; for what atheists deny is not the conception of God, but His existence, and they must be able to conceive what they deny. The idea of God, or the definition of God, may then be admitted with common consent, both by those who believe in God and by those who do not. If, therefore, from this idea itself it were possible by pure reasoning to deduce existence, we should have a truly necessary demonstration of the existence of God.

Having laid down this postulate, Anselm takes for granted the following definition: God is a being of such a nature that it is impossible to conceive any greater. From this definition he draws the following conclusion:

"This good, which is such that it is impossible to conceive any greater, cannot exist in the mind only; for were it so, it would be possible to conceive a good that was yet greater, namely, one which would exist not only in the mind, but in reality. If we can conceive a good which we are unable to conceive as being without existence, this good would be greater than one we are able to conceive as being without existence, therefore the latter, contrary to our definition, would not be the greatest good conceivable" (*Proslogium*, Ch. II).

Even in the Middle Ages, there were many who opposed this argument. The monk Gaunilo wrote a work against St. Anselm's theory which contains the germs of all the criticisms made in modern times by Gassendi and Kant (Gaunilo, *Liber pro insipiente*). He begins by questioning whether we have within us the idea of God, in other words, whether God exists in the mind,—which was the major premiss of the argument; then he asks whether, because we have the idea of God, it is

permissible to infer from this that God exists objectively and in reality. These two objections cover the whole argument. As regards the first point, his dilemma runs thus: Either God exists in the mind after the manner of other things which may be true, or false, or doubtful, or He exists in the mind in such a way that it is impossible to conceive Him without conceiving Him at the same time as existing. In the first case nothing can be inferred as to His existence; since *ex hypothesi* it would be the same with Him as with other things, which may or may not exist. In the second case, what had to be proved is assumed in the principle, and the distinction which was our starting point, that is, the distinction between God and His existence, has been abandoned.

He then proceeds to attack directly the major premiss of the argument, and affirms that we have not the idea of God: "For," says he, "the thing which is God I cannot know in itself, and I cannot form an idea of it from analogy, since it is precisely its essence that there is nothing analogous to it." He even goes so far as to say that God is merely a sound, *litterarum sonitum*.

As regards the argument itself, Gaunilo, using an ingenious comparison, brings forward the following objection:

"Truth is one thing and thought is another. Hence, although it is true that I can conceive something which is such that I cannot conceive anything greater, this truth heard and understood is so far merely like a picture not yet painted, which only exists in the mind of the painter."

"I conceive," says he, "a happy isle full of delights, such an island that one cannot conceive one more beautiful. What follows from this? That the island exists in reality since it exists in the mind; for if such an island (which is such that I cannot conceive one more beautiful) did not exist in reality, I could conceive another that was more beautiful still, an island, that is, which did really exist."

It is to be regretted that St. Anselm did not think fit to refute this ingenious objection. He only replied to the first, namely, that we have not the idea of God. "Do you mean that we have not a complete knowledge of God as He is? This I grant, but what follows? Because we cannot look at the sun does it follow that we are blind? Every imperfect thing implies something that is more perfect; there must therefore be something which is absolutely perfect, so that there is nothing more

perfect." St. Anselm complains, moreover, that Gaunilo altered his argument when he accused him of a *petitio principii* which only exists in his opponent's proof and not in his own (Em. Saisset, *De varia argumenti Anselmi fortuna*).

But it was not only a more or less recusant monk who pronounced against St. Anselm's argument; some of the greatest authorities in scholastic philosophy were opposed to it, the first in importance among these being Thomas Aquinas.

"Granted," he says, "that a person understands this word God to signify something so great that it is impossible to conceive anything greater, it does not follow that by this he understands that what this word signifies exists in reality, for as yet it only exists in the apprehension of his understanding."

And, laying hold of the weak point in Anselm's argument, he makes the following profound remark:

"Since God is His own real being, and since His essence is hidden from us (*cum quod sit nos lateat*), the proposition 'God is' is no doubt known of itself, but it is known in itself, and not in any relation to us."

Thomas Aquinas, carrying the same idea further, says, even more clearly (*Summa contra Gentes* I, 11):

"Just as to us it is evident that the whole is greater than its parts, so to those who see the Divine essence as it is, the truth is self-evident that God is, seeing that His essence is His existence. But as we are not able to see the essence, we can never succeed in knowing Him in His essence, but only through His effects."

We may say, then, that in general the Schools were against the Ontological argument. Gerson even says, *Nescio quis insipientior sit, an is qui putat hoc sequi (Deum; si est in intellectu, esse et in re) an insipiens qui dixit in corde suo: Non est Deus* (see Saisset, p. 34). Duns Scotus also pronounces against the argument (D. Scoti, *Opera IV, Quaest. supra Metaph.* I, 9, 12). On the other hand, it was defended by Bonaventura and Henry of Ghent (see Saisset, p. 35).

Other Proofs of the Existence of God: Impossibility of an Infinite Chain of Causes; Proof "a contingentia mundi"; Proof of a First Mover; Proof from Final Causes; Proof by the Idea of Perfection.

Generally speaking, most of the other known proofs of the existence of God are to be found in mediaeval works.

1. The impossibility of an infinite chain of causes :

Given a thing that is caused, it must have been caused either by nothing, or by itself, or some other thing. That it was caused by nothing is impossible, for nothing causes nothing, therefore it must be caused by some other thing. Let us call this term A; if A is not first cause it must be an efficient second cause, that is to say, a cause which is only efficient by virtue of some other thing. Let this other efficient cause be B. We shall reason about B in the same way as about A, and so on *ad infinitum*. But an infinite regression is impossible; therefore there must be a first necessary cause, which, having no antecedent, can at no time be posterior to itself; for that there should be a circle in the series of causes is contradictory (Duns Scotus, *Sentent.* 1, dist. 2, q. 2).

Ockam upholds the same argument, but in his demonstration there is one important point to be noticed: in order to avoid an infinite regression, he dwells, like Descartes, more on the *conservation* of the Universe by God than on its *production*, because while the one conception requires an actual cause, the other, strictly speaking, does not.

"It would seem," he says (*Sentent.* dist. 2, q. 10), "that the priority of the efficient cause can be proved with more evidence with respect to the conservation of a thing by its cause than with respect to its production thereby. The reason of which may, perhaps, be that it is difficult, if not impossible, to prove that there is not an infinite progression in causes of this kind (*i.e.* in *producing* causes). But there is no infinite progression in *preserving* causes, for if it is possible to conceive producing causes as not being actually infinite, one cannot conceive preserving causes without actual infinitude."¹

2. The proof *a contingentia mundi* is also to be found in Scholastic works.

It is evident that there is something which exists of itself, and has existed from all eternity. Otherwise there must have been a time when nothing existed, not even that which belonged to the future, since He who was able to give existence to Himself as well as to others, was not (Richard of St. Victor, *De Trinitate*, I, Ch. viii). What is mutable cannot have existed always, for what could not remain fixed as long as it was present, shows that the moment before it was, it was not. It is thus that nature proclaims her Maker (Hugh of St. Victor, *De Sacramen.* Pars III, 1, Chap. x). That which may not be has not always been. If all things are such that it is possible for them not to be, there must have been a time

¹ See Descartes (3rd *Médt.*): "And it is very manifest that we have here to do not so much with the cause that once gave me being, as with the cause that preserves me now in being."

when nothing existed. But if this were the case, then, even now nothing would exist ; for what is not, only begins to be through what is. Therefore, all beings are not purely possible, and there is something which is necessary (Thom. Aq. *Summa Theologiae*, I, qu. 2, a. 3).

3. In a more particular sense the proof *a contingentia mundi* is the same as Aristotle's proof of a *first mover*, which is reproduced almost word for word by Thomas Aquinas.

"What is moved is moved by something. To impart motion is nothing else than to cause something to pass from potentiality to actuality. Now a thing can be changed from potentiality to actuality only by something which is actual. But this cannot be carried back *ad infinitum*, for the secondary movers only impart motion because they are themselves moved by the first mover, just as a stick only moves a thing through the motion of the hand."

4. The proof to which the Scholastics appear to have given least attention is that of *final causes*, no doubt because this proof rests largely on experience, which they were always inclined to sacrifice to reason. Still St. Bonaventura says :

"He who is not illumined by the splendour of created things is blind. He who is not awakened by nature's many voices is deaf. He who is not led by all these things to praise God is dumb."

Thomas Aquinas expresses the same thought in a more scientific way when he says :

"We see that certain things which do not possess reason, for example, natural bodies, yet act towards their end, since they often and frequently act in the same way so as to fulfil their end. Whence it follows that it is not through chance, but through intention that they attain their end. But things that are unconscious cannot tend to an end unless they are directed by an intelligent and conscious cause. There is therefore an intelligent Being by whom all things are directed towards their end, and this Being we call God" (*Summa Theol.* I, qu. 2, a. 3).

5. Lastly, the Scholastics were not ignorant of the proof which was expounded with such eloquence by Bossuet, the proof namely which rests on the thesis that imperfection presupposes perfection.

"O my soul," says Gerson, in a passage which Bossuet appears to have imitated, "I cannot know thee without knowing thy being and thine essence ; and I cannot know what is imperfect as thou art without knowing what is perfect ; I can therefore know nothing without knowing God, at least as it were in His shadow" (Gerson, *Opera*, 1728, I, p. 104).

As might be expected, we also find in the works of mediaeval philosophers, and especially in those of the mystics, the proof by feeling, which rests on the yearning of the human soul after the Infinite.

"Wisdom (*sapientia*) is to know and to follow God in such a manner that we relish naught (*quid sapiat*) but Him alone. He who loses not this relish is happy" (Hugh of Saint Victor, *De Finibus Hominis*, Ch. LXVII). "Go, poor humanity, leave thy concerns; far from tumultuous thoughts humbly hide thyself. Throw off the burden of these laborious discussions, descend into the innermost depths of thy soul; shut out all things else but God. O God, if not there, where shall I find thee?" (Anselm, *Proslogium*, Ch. I).

Theories held in the Middle Ages concerning the Nature of God; Theism and Pantheism; The Theodicy of Thomas Aquinas.

Having examined the proofs of the existence of God, we now pass on to Theodicy proper, that is to say, to the science of the nature of God, and of His relation to the world. On this subject we find in the Middle Ages two currents of opinion. Firstly, the orthodox theodicy which was based on the doctrines of Aristotle and St. Augustine. Secondly, an irregular and pantheistic theodicy derived from the schools of Alexandria and of the Areopagite. The first, which was approved by the Church, prevailed in the schools, and was the only one openly taught; the second, which flowed parallel with, or rather, beneath the other, was taught more or less secretly by the heretical sects and in the Arab schools. The one found its greatest representative and highest authority in Thomas Aquinas; the other was given a systematic and complete development by two writers only, who belonged to different ages—Scotus Erigena and Eckart. The first of these theodicies was to be the foundation of the religious philosophy of the seventeenth century, and the second, that of the German philosophy of religion in the nineteenth century.

Let us first give a summary of the doctrine of St. Thomas Aquinas.

We have already seen that, according to Aquinas, the essence of God is not known to us in itself, but only by its effects (*Summa Theol.* I, I^a, q. 12, art. 1, ad 1; and I, I^a, q. 3, a. 4,

ad 2).¹ God's being is identical with His essence (I, I^a, q. 3, a. 4). Whence it follows, as St. Anselm saw, that His existence must be deducible from His essence; but although this proposition is true in itself, it is not true for us, who only know this essence in its effects. Thus we cannot know what God is in Himself (I, I^a, q. 1, a. 7, ad 1); but we are nevertheless able to affirm that, for the very reason that He is the Being which subsists of itself, His being is different from that of creatures (I, I^a, q. 3, a. 2, ad 3, and a. 4, ad 1); and at the same time one may also say that He is the being of creatures, not as their form and matter, but as their efficient cause (I, I^a, q. 3, a. 8). In Himself, God, as Aristotle said, is pure actuality; in other words, absolute perfection (I, I^a, q. 4, a. 1, concl., and q. 3, a. 1, concl.), and because He is pure actuality, pure form without matter (q. 3, a. 3, concl.), He is not the form of the body (q. 3, a. 8), nor the soul of the world (*Ibid.* concl.).

He Himself is not body (q. 3, a. 1): He possesses no senses, except by analogy (q. 3, a. 1, ad 1). He is absolutely simple (q. 3, a. 1, and q. 9, a. 1, concl.). Since he is pure actuality, in Him substance becomes identical with form (q. 3, a. 3, I), and even the term substance is only appropriate to Him in so far as it indicates that which subsists in itself (q. 29, a. 3, ad 4). God contains within Himself all the perfection there is in creatures, but in a more eminent way. *Oportet omnium rerum perfectiones residere in Deo secundum eminentiorem modum* (q. 4, a. 2, concl.). Although God is distinct from His creatures, these have not a being that is compensable with God, for God and the created thing taken together do not form something that is greater than God by Himself (II, I^a, q. 103, a. 3, ad 1 and 3, and 2). God is infinite, not with a material infinitude, but with a formal infinitude, inasmuch as in Him form is not limited by matter. Being pure actuality, He is of Himself infinite form (q. 7, a. 1).

From the consideration of the essence of God in itself, we now pass to His divers attributes, and we shall begin by examining the question of divine knowledge. God possesses knowledge (q. 14, art. 1); for beings that know are superior to

¹ The following is the meaning of these abbreviations: the *prima primae*, first part of the first part; question 3; article 4, answer to the second argument.

beings that do not know, because they possess not only their own form, but also the forms of other beings. God, being pure form, contains the form of every form, and consequently possesses knowledge in the highest degree; but, as the perfections of creatures exist in God in an eminent way, God's knowledge is not of the same kind as human knowledge, being neither a quality nor a habit, but a substance and a pure activity. Hence God's comprehension is always actual, and He needs neither to combine nor to divide; in other words, His knowledge does not proceed either by analysis or by synthesis (q. 14, a. 14, concl.). God's knowledge is not discursive, but intuitive and simultaneous (*Ibid.* a. 7). But what are the objects of the divine knowledge? In the first place, God knows and understands Himself (q. 14, a. 2 and 3). Secondly, God knows other things besides Himself (*Ibid.* a. 5), and not only in a general and abstract way, but in an eminent and higher manner, inasmuch as He contains within Himself the perfection of all beings (*Ibid.* a. 6). He knows individual things as such, and by the same act as general things. In the divine understanding the universal idea is not arrived at by abstraction, but is the principle of particular things, and it is in the general that God sees the particular (*Ibid.* art. 11). He does not, as Aristotle thought, lower Himself by knowing things inferior to Himself (q. 22, a. 3, ad 3). There are in God two kinds of knowledge. The knowledge of vision and the knowledge of simple or mere intelligence¹ (q. 14, a. 9, concl.). God possesses not only intelligence, but will (q. 19, a. 1). For will is a consequence of intelligence; inclination towards the good being nothing else than appetite, and appetite, when its object is sensible, is called sensible appetite, and when its object is intelligible, is called intelligible appetite, and is will. In reality, will is the very being of God, though it can be distinguished from it rationally or by abstraction (q. 19, a. 2, ad 1). Thomas Aquinas asserts that God is free, but he does not clearly explain how he conceives this freedom. He makes a distinction between an absolute and a hypothetical

¹ By knowledge of vision St. Thomas means knowledge of things which exist or which, without actually existing, have existed or will exist; and by knowledge of simple intelligence, he means knowledge of things which will never exist, but which might exist on a certain hypothesis.

necessity. Absolute necessity is intelligible of itself; hypothetical necessity is the necessity in virtue of which a thing is, if it is. For example, the proposition Socrates is seated, is necessary hypothetically; for, assuming that he is seated, then he is not standing; but this is not absolutely necessary. So it is with the will of God in its relation to finite things. He wills them necessarily, if He *does* will them; but He does not will them by an absolute necessity, because they do not form part of His essence (q. 19, a. 3, concl.). God is therefore free (*Ibid.* a. 10). His will is perfect (q. 14, a. 2, ad 3). Its special object is the essence of God, that is to say, goodness (q. 19, a. 1, ad 3). But although God, in the first place, essentially wills Himself, He may also will other things besides Himself, for it is in the essence of the will to communicate as much as possible to others the good it possesses. The divine will is therefore disposed to communicate His goodness to creatures by reflecting His image in them (q. 19, a. 2, concl.).

Aquinas distinguishes in God an *antecedent* and a *consequent* will (q. 19, a. 6, ad 1). The antecedent will is that which wills a thing absolutely, independently of circumstances; and the consequent will is the one which wills a thing with reference to certain circumstances. For example, the judge wills by an antecedent will that every man should live; but with a consequent will that the homicide should be hung. In the same way, God wills with an antecedent will that all men be saved, but with a consequent will that sinners be punished. There is another distinction between *voluntas bene placiti* and *voluntas signi*. The former is the inner will of God, the latter, His will as manifested by signs¹ (q. 19, a. 12).

On the doctrine of the divine will depends the doctrine of the love of God. Aquinas proves that there is love in God; for the first movement of will and of the appetitive part in general is love (q. 20, a. 1, concl.). The object of love being the good, God loves all beings in proportion as they are good (*Ibid.* a. 2). As regards the question, whether God loves anything else besides Himself, it is the same question as whether He knows anything else besides Himself, and is solved in the same way.

¹ According to St. Thomas there are five signs: Prohibition, Persuasion, Precept, Counsel, and Operation (q. 19, a. 12).

God possesses not only will, but power (q. 25, a. 1); but power is not in itself a special attribute, it is part of His essence (q. 25, a. 1, ad 2); for every being acts in proportion to the amount of actuality it possesses (*Ibid.*), and it is active power only that belongs to God and not passive power (q. 25, a. 1). God being all actuality is omnipotence (q. 25, a. 5), and can do anything that does not imply contradiction (q. 7, a. 2, ad 1, and q. 25, a. 3 and 4). He may alter the order. He has Himself established (II, 1^a, q. 105, a. 6, concl.), but He can do nothing that is not in accordance with His wisdom and His goodness (I, 1^a, q. 21, a. 4, concl.).

To proceed to the attributes of God and to His relation to the world: God's fundamental attribute is that of a Creator; in other words, He can make something out of nothing (q. 45, a. 1, concl.), and He alone can create (*Ibid.* a. 5). There is no creation in the works of nature and of art, for these works always presuppose some pre-existing matter (*Ibid.* a. 8). Creation is the work of mind and of will, and consequently of a person (q. 29, a. 4 and 45, a. 6, concl.). If God is a creator, if He creates by His intelligence and His will, it follows that the universe as a whole has not always existed (q. 46, a. 1). At this point Aquinas replies to the arguments given by Aristotle in proof of the eternity of the world, and he appears to think that Aristotle did not seriously uphold this thesis. At the same time, the doctrine that the world had a beginning cannot be proved by reason, and can only be established by faith (q. 46, a. 2).

- God is not only the Creator, He is also Providence (q. 22, a. 1). For all that is good in creatures comes from God; He is the cause of the order by which all things are led to their end (*Ibid.* concl.). Providence comprises two things—the conception of the universal order and the production of this order (q. 22, a. 3, concl.). The Atheists (Democritus, Epicurus) denied providence altogether, and believed that everything was subject to chance. Others believe that providence only extends to incorruptible beings, to the heavens. But Divine Providence embraces all creatures (q. 22, a. 2, concl.), and, moreover, it acts on them directly and without any intermediary (*Ibid.* a. 3).

Although Aquinas affirms that God can do nothing contrary

to His wisdom and goodness, he is not an optimist after the manner of Leibnitz and Malebranche, who taught that God could not do otherwise than choose the best of all possible worlds. On the contrary, according to St. Thomas, God can always make better things than those which he has made (q. 25, a. 6). For the divine goodness is infinite, and consequently far greater than the number of His creatures, however great that may be; and for this same reason it is in His power to create things other than and superior to those He has made.

At the same time, God's divine omnipotence does not permit of His committing sin; God is impeccable (q. 25, a. 3, ad 2). But if God is the creative and providential cause of the world, why does evil exist? Evil is not real being (q. 48, a. 2, ad 2), and yet it is not a pure negation. Evil is the privation of good (*Ibid.* ad 1). It can only be conceived through the good (q. 14, a. 10, ad 4). If evil exists, absolute evil does not (q. 49, a. 3). Evil is either natural (physical) or moral. Aquinas says very little about natural evil, which is not real, since it is only a privation. The true evil is the moral, which is divided into two kinds—the *malum culpae* and the *malum poenae* (q. 48, a. 5). In any case, God is only the cause of evil by an accident, and, moreover, He is the cause of the *malum poenae* only and not at all of the *malum culpae* (q. 49, a. 2, concl.).

In a word, God is the efficient, exemplary, and final cause of all things (q. 44). This formula embraces and expresses the whole of the theodicy of St. Thomas.

Irregular Theology in the Middle Ages: Pantheistical Doctrines; Dionysius the Areopagite; Scotus Erigena; Amalric of Bena, and David of Dinant; Eckart.

Besides the orthodox theology, of which Aquinas was the chief representative, there existed throughout the Middle Ages a covert system of Pantheism which was characterized by two fundamental ideas: (1) God reduced to absolute unity, above all difference and all comprehension. (2) God, as not only the cause, but the substance and essence of individual beings. This philosophy, which was derived from the school of Alexandria, had as its principal representatives Dionysius the

Areopagite, Scotus Erigena, Amalric of Bena, David of Dinant, and lastly, Meister Eckart and the German mystics of the 14th century. Mention must also be made of the Arab and Hebrew ramifications, such as, for instance, the doctrine of Averroës and Avicbrôn, etc. We shall do no more than point out the general features of these doctrines.

In his mystic theology and in his *Treatise on Divine Names*, Dionysius the Areopagite, or the pseudo-Dionysius, remarks that there are two kinds of theology: *affirmative theology*, which proceeds from God to finite things, and represents God as *having every name*; and an *abstractive theology*, which rises above all positive or negative determinations and considers God as being *without name*. He teaches that God is not goodness, but the super-goodness, the super-divinity, the super-essence. He has no name, corresponds to no essence; nothing can give us a conception of super-divinity (*Of the Divine Names*, Ch. 11 and 13).

Scotus Erigena, in his *De Divisione naturae* develops the pantheistical doctrine in a much more scientific and complete manner. He divides beings or nature into four species: 1st, that which creates and is not created, *creans non creata*; 2nd, that which is created and creates, *creata et creans*; 3rd, that which is created and does not create, *creata et non creans*; 4th, that which neither creates nor is created, *non creans, non creata*. To the first of these species belongs God Himself, for He alone creates and is not created. He also constitutes the uncreated and non-creative essence, but from a different aspect, that is to say, as end; for, regarded as the end of beings, God is not a creator. The second species, that which creates and is created, embraces all the divine models and prototypes, is the Word (Plato's *αὐτοζῶον*). Lastly, the third nature, which is created and does not create, is the world, and here it is that the pantheistic character of Erigena's teaching appears more especially. To him creation was only a procession (III, 25, *Processio*) from God. All that God saw, He always made, for with Him vision does not come before operation, but is co-eternal with it. He sees in acting, and He acts in seeing: *videt operando et videndo operatur* (III, 17). God is the substance of all finite things and these cannot exist outside Him. He is the

true and only essence of all things, and there is truly and properly speaking nothing that is not this essence itself (*ipsam solam esse vere ac proprie in omnibus et nihil est vere ac proprie esse, quod ipsa non sit*).

God and His creature are to be considered not as two things, but as one single thing, and that is God Himself (*sed unum et id ipsum*). For the creature which really exists in God appears in an ineffable and miraculous manner in creation, thereby becoming manifest: the invisible making itself visible, the incomprehensible comprehensible, the hidden discovered, the unknown known, what is without form and figure becoming determinate, the super-essential essential, the super-natural natural; in a word, creating and created, making and made in all things: *Intisibilis visibilem, incognitus cognitum, forma et specie carens formosum et speciosum; super-essentialis essentialem, super-naturalis naturalem, omnia creans in omnibus creatum, et omnipotens factor factum in omnibus* (*Ibid.*). Our life is God's life (I, 78). *Se ipsam sancta trinitas in nobis et in se ipsa amat, videt, movet* (*Ibid.*). Man's knowledge of God is a revelation, the appearance of God in him a theophany (*θεοφανία*) (I, 7).

In short, according to Scotus Erigena, God is all that is, *Deus est omne quod vere est*; what we feel and understand is only the appearance of Him Who, in Himself, does not appear, *non apparentis apparitio*, the manifestation of Him who is hidden, *occulti manifestatio*, the affirmation of Him who is in Himself only a negation, *negati affirmatio*. God is the essence of all things; creation is not accidental but essential, *non est Deo accidens universalitatem condere*; creation is therefore eternal, *universalitas in sua causa aeterna est*. Before He created God was not. God and His actions are not two things, but one. If all things come from God, all must return to Him. For it is He Himself who returns to Himself, bringing back all things to Himself. *In se ipsum redit revocans in se omnia*.

This same doctrine of immanence was held in the 12th century by two philosophers whose writings have been destroyed—Amalric of Bena and David of Dinant. The following, according to Gerson (*De Concordia metaphys. cum logica*), was their theory:

All things are God, and God is all things. *omnia sunt Deus et Deus est omnia*. God is at once creator and creature, *creator et creatura, idem Deus*. As God is the source and principle of all things, so is He also their end, and all must return to Him in order to be immutable and at rest, and to form an indivisible unity: *et ita unum individuum et immutabile*. All is one, in other words, all is God: *omnia unum esse quod idem est omnia esse Deum*. According to Albertus Magnus, David of Dinant, in his book *De Divisionibus*, endeavoured to prove that Noirs or intelligence was identical with the *materia prima*, and that this identity corresponded with the highest conception of thought. If they are regarded as distinct, it is necessary to pre-suppose a common Higher concept in which they are reunited, and this concept would be precisely the identity of God with the *materia prima* (Albert Mag. *Summa Theolog.* I, 4, 20).

Among the mystic and pantheistic doctrines of the middle ages, that of Master Eckart (14th century) was the most profound and also the most audacious. He not only, like Scotus Erigena, reproduced Alexandrian ideas, but he also foreshadowed and prepared the way for modern German theology. God, he says, is above being; He is the identity of being and non-being (*Gott ist ein nicht und Gott ist ein Icht*). God is neither this nor the other; He is in all things, in the stone, in the piece of wood, etc. (*des Gottes leben und wesen sey in eym Steine, in eym Holz*). The term "to be" (*das Wort sum*) can be said of God alone. But God is not separable from thought; in Him being and thought are identical (*sein Wesen ist sein Bekennen*). God must be distinguished from His divinity. divinity is God's hidden substance, the eternal and profound darkness in which God is unknown to Himself (*es ist die verborgenen Finsternuss der ewigen Gottheit*). God, on the other hand, is divinity manifesting itself and conscious of itself in its external activity. Before the existence of creatures God was not yet God (*es die Creaturen warent, do was nit Gott*). God's manifestation of Himself is necessary. He speaks eternally and without interruption; He must act whether He wills it or not (*er woll oder er woll nit, es muss disz sprechen*). God thereby engenders Himself, that is to say, He engenders His Son (*Sein wurcken ist seiner sun geberen*), and all things in Him (*er spricht all Ding in im*). All creatures are a word of God; what my mouth speaks, the stone speaks also; each creature is full of God, each bears the impress of the divine nature, is a book of God (*ein yegliche Creatur ist voll Gottes, und*

ist ein Buch). The thirsty man would not desire to drink were there not something of God in what he drinks (*er begerete es nit, wære nit etwas Gottes darinn*). . . . (See M. Ch. Schmidt's *Mysticisme allemand au quatorzième siècle: Mémoires de l'Académie des Sciences, Morales, Savants étrangers*. Vol. II, 1846.)

CHAPTER II

THE RELIGIOUS PROBLEM IN MODERN TIMES

1. PROOFS OF THE EXISTENCE OF GOD

IN modern philosophy, we have always to return to Descartes if we wish to trace the history of the different problems from their origin. Descartes' theology contains, it is true, many elements that were borrowed from mediaeval and ancient Philosophy; but his method was quite peculiar to himself, and entirely original. This method, which is the philosophical method *par excellence*, makes doubt its starting point, with self-evidence as the criterion of truth. To refuse to admit anything that is not absolutely proved,* and to accept as proved only that which is self-evident: this is the Cartesian method.

It is true that this method had been followed implicitly in every system of Philosophy, including those of the Middle Ages; for when Thomas Aquinas in his *Summa theologiae* begins by asking the question: *An Deus sit*, and unhesitatingly replies, *Disso quod non*, it is evident that he intends to question every truth, even that of the existence of God, and to accept this truth only when he has answered his own objections, and established it on proofs that are self-evident. But this method, without which, indeed, there can be no philosophy, was employed without reflexion by Aquinas and the rest. With Descartes, on the other hand, it was a conscious method. He also was the first to formulate it, and for this reason he may be regarded as the father of modern Philosophy.

* Another original feature in the Cartesian method is that it

starts from the existence of thought, and consequently of the thinking subject, as from a primary truth. Whatever the ideas may be which are to be established by Philosophy, one thing will always remain true, and absolutely so, and this is the consciousness of self.* I may doubt the existence of bodies and of God, and even of mathematical truths, but I cannot doubt my own thought; for my doubt itself is a thought, and to think or to doubt is to exist, since that which has no existence cannot think. I who think am, therefore, something, and I am only inasmuch as I think; therefore, I am a thing whose essence it is to think: I am a thinking thing, in other words, I am a spirit.

Thus Descartes establishes not only the method of modern philosophy, but its very principle, namely, the conception of the subjective—the subject as opposed to object, the ego as the identity of subject and object.

Descartes.—The Three Proofs of the Existence of God: the Proof "A Contingentia Mentis"; the Proof derived from the Idea of the Infinite, and from the Necessity of an Adequate Cause of this Idea; the A Priori Proof that Existence is involved in the Idea of Perfection.

From the above principles, Descartes sets out to establish the existence of God. He does not make use of physical proofs, nor of what is called the cosmological argument, nor of the proof by final causes, because he has not as yet proved the existence of the world and of material things, and, moreover, he requires the existence of God in order to prove the existence of these things. It is, therefore, in the human mind, and in the human mind alone that he seeks and finds proofs of the existence of God.

These proofs he finds both in the existence of the ego and in the ideas of the ego. What is usually called the proof *a contingentia mundi* becomes with him the proof *a contingentia mentis*. As for the ideas of the ego which lead up to God, there is in reality only one, namely, the idea of God or of perfection; but regarded from two different points of view, this idea affords two different proofs. Hence, in Descartes, there are three distinct proofs of the existence of God; and since the one we have named *a contingentia mentis* itself implies

the idea of God, it follows that it is upon this idea that all Descartes' proofs are founded.

• *First Proof.*—Descartes' first proof may be stated as follows: The idea of God implies the existence of God, for the effect presupposes the cause. We have, no doubt, illusory ideas which, without presupposing the existence of their object, can be explained by the combination or amplification or abstraction of real elements; but the question precisely is, whether amongst our ideas there is not one whose existence can only be explained by admitting the existence of its object: and this peculiar privilege belongs to the idea of God, which can be proved either *a posteriori* by the principle of causality or *a priori* by simply analysing the idea of God.

In the first place then, what is this idea?

"By the name God I understand a substance infinite, eternal, immutable, independent, all-knowing, all-powerful; by which I myself and every other thing (if any such does in truth exist) have been produced" (*Med. III*).

Whence can such an idea have come to my mind? For, as an existing idea, its origin requires an explanation, and it must have had a cause. Can I have given it to myself? It is true, that being myself a substance I can give myself the notion of a substance different from myself, but how is it that I, a finite being, am able to conceive the notion of an infinite substance?

Here Descartes lays down a principle which he borrows from the Scholastics, namely, "That there must be as much reality in the efficient and total cause as in the effect" (*Cousin, I, p. 273*). The cause of the idea of the Infinite must therefore contain at least as much reality as this idea itself. No doubt our ideas, regarded as modes or states of our thinking faculty, have all the same value and all flow from the nature of our mind, which is a thinking thing. They are implied in the ego as a mode is implied in substance; but as representations of certain objects, as ideas, they possess another kind of reality, a reality relative to that of the object: this Descartes calls the *objective*¹ reality of the idea. Ideas

¹ In scholastic language the term *objective* is not used in quite the same sense as by modern philosophers. The objective is opposed to the real and is a part of the subjective; it is that which in the subject is representative of the object. In other words, it is the idea in its relation to the object.

have more or less objective reality, according as their objects have more or less formal or essential reality: thus the idea of plant has more objective reality than the idea of stone, because the plant possesses more attributes than the stone; and "however imperfect this manner of being may be in which a thing exists *objectively or by representation* as an idea in the understanding, it certainly cannot be said that this fashion or manner of being is nothing, and that consequently this idea derives its origin from nothing" (*Ibid.* p. 274).

And now, since, speaking generally, every cause must have as much reality as its effect, we are able to draw therefrom another principle, namely, that "for an idea to contain such or such an objective reality rather than another, it must owe this to some cause in which there is at least as much formal reality as there is objective reality¹ in the idea." To explain the reality of the idea of the Infinite in thought, there must then, be a cause which possesses within itself an actually infinite reality.

Let us, however, see whether it is not possible to account for this idea in some other way. Descartes examines three explanations which are given by the Empiricists: (1) Negation (*Ibid.* p. 282); (2) Multiplication (p. 288), (3) Infinite addition (p. 280).

(1) That the Infinite is merely a negation, the negation of the finite, and the idea of infinitude a negative idea. On the contrary, Descartes replies, there is more reality in an infinite substance than in a finite one, and thus the notion of the Infinite is in my mind before that of the finite. Moreover, it cannot be said that this idea, being materially false, is derived from the non-existent, since it has more reality than any other idea.

(2) Several causes may have co-operated simultaneously towards the production of this idea; from one of these I may have received the idea of some one of the perfections which I attribute to God, and to another cause I may owe the idea of some other perfection; so that all these perfections may well exist in some part or other of the world, but do not exist all collected and combined together in a single being, which would

¹That is, objective reality in the sense given by modern philosophers to the word objective.

be God. On the contrary, says Descartes, the unity, simplicity, and inseparability of all the things which are in God constitute one of His chief perfections; and the idea of the unity of these perfections cannot have been put into my mind by any cause whatsoever.

(3) But it may be that I am something more than I imagine, and that all the perfections which I conceive to be in God exist potentially in myself. Would not this faculty which I possess of increasing these perfections indefinitely be sufficient to reproduce the ideas of them in my mind? Reply: It is a certain proof of the imperfection of my knowledge that it grows gradually, and continues to increase. God I know to be, on the contrary, actually infinite in such a degree that He cannot add anything to His own supreme perfection. Now, the objective existence of an idea (i.e. the idea of an actually infinite being) cannot be caused by a being that has only a potential existence.

If the idea of the infinite cannot be explained in any way by the existence of the finite, it must be that this idea has a cause which is at least equal to itself, and which contains actually what is ideally possessed by the mind.

Second Proof.—What is known as Descartes' second proof, was in reality for him only part of the first proof. However, although merely an expansion of the latter, it may be considered apart.

Descartes puts the question—Would I, who possess the idea of God, exist if there were no God (*Ibid.* p. 284) and he replies that this would be impossible; for, since I possess the idea of God, if I had given myself existence I should have at the same time given myself all the perfections of which I have the idea, in a word, I should be God; but I am not God. I must, therefore, owe my origin to some other cause; but as the same reasoning applies to this other cause, I must go on until I find the cause which actually possesses all the perfections of which I have the idea, and which, consequently is God.

Thus expressed, this proof appears somewhat strange; for Descartes seems to assume that if the ego is self-existent it must have voluntarily given existence to itself, and consequently must have existed before it was, which is contradictory. If we take it in this sense, the argument appears, strictly

speaking, to be sophistical; but, on the other hand, he who says that God exists through Himself, that He is the self-existent, at the same time affirms that He has within Himself the cause of His own existence, and Descartes, to explain his meaning, says, that in God essence is identical with cause (the formal cause, as he says, with the efficient cause), that the essence stands to Him, therefore, in the relation of an efficient cause¹ (*Rép. à Catérus*, p. 382). The essence of God, viz., self-existence, has, therefore, in a manner the same relation to Him as cause to effect. The being, therefore, which possessed this supreme power of self-existence would by that very fact possess the power of endowing itself with every perfection which is the same as saying that absolute existence implies absolute perfection.

We must draw attention to an important point in this argument of Descartes, namely, that the preservation of a substance is identical with its creation, and that consequently the question is not so much, who created me at first, as, to whom do I owe my preservation at this moment? Now, this I can attribute neither to myself, nor to my parents, nor to any other cause, unless it be to one which possesses in itself all the perfections of which I have the idea.

In this way, according to Descartes, we avoid the objection of an infinite regression, an objection which might, strictly speaking, be brought against the theory of a creative cause, since we might go on ascending from cause to cause in the series of time; but it is not so with the preserving cause, which, if it explains my actual existence, must itself be actual.

Third Proof.—Lastly, we find in Descartes a celebrated proof, which we have already met in the middle ages. This proof is generally known as that of St. Anselm, and is called by Kant the ontological argument. Descartes states it as follows:

“It is certain that I no less find the idea of God in my consciousness, that is, the idea of a being supremely perfect, than that of any

¹ Descartes compares this process of reasoning, by which we pass from the formal to the efficient cause, to the geometrical reasoning which proceeds from the circle to the polygon (*Rép. aux objections d'Arnauld*, Cousin, II, p. 68).

figure or number whatsoever; and I know with not less clearness and distinctness that an actual and eternal existence pertains to His nature, than that all which is demonstrable of any figure or number really belongs to the nature of that figure or number" (*Med. V*).

This reasoning, says Descartes, has a somewhat sophistical appearance; for in all things a distinction is made between essence and existence, and I conceive likewise that the existence of God may be separated from His essence. But on reflection I see, that in God existence cannot be separated from essence. For every time it happens that I think on a first and supreme being, I am obliged to attribute to Him every perfection: now existence is a perfection, therefore I am able most clearly to infer that this supreme being does exist. This proof has justly been named the *a priori* proof, and is the only one of its kind. For in all the other so-called metaphysical proofs there enters, to some extent, considerations borrowed from contingent things, and the process is always from effect to cause. Here, on the contrary, we do not go beyond the consideration of the idea, and it is from the essence of the being itself that the existence of that being is inferred. Thus, it is an entirely *a priori* proof. This proof has been much disputed, and even in Descartes' own time Gassendi brought forcible objections against it, the most important of which, or, at least, the only objection which really went to the heart of the question, was that existence is not a property of a thing, and consequently not a perfection.

"Existence, says Gassendi, is not a perfection, but a form or an activity without which there can be no perfection, and truly that which does not exist has neither perfection nor imperfection. It is not said of a thing which does not exist that it is imperfect, but that it is null" (*S. obj. Cousin*, II, p. 202).

To which Descartes replies:

"I do not see to what kind of things you would have existence to belong, nor why it cannot also be a property like omnipotence, taking the word property to mean any kind of attribute. Much more, in God, necessary existence is truly a property in the narrowest sense (*proprium*), because existence is proper to Him alone, and it is only in Him that existence is part of essence" (*Ibid.* p. 291).

Divers other Proofs : Spinoza ; Leibnitz ; Malebranche ; Bossuet : Proof by the Eternal Truths.

Descartes' proofs of the existence of God were, in general, used as the basis of all the demonstrations proposed in the 17th century. They were, however, modified or transformed by each of the great philosophers of this period, according to his particular cast of mind. Spinoza, for example, gives the *a priori* or ontological argument of St. Anselm and Descartes, under a new form, in the following words :

"For since ability to exist is power, it follows that the more reality belongs to the nature of anything the greater is the power for existence it derives from itself ; and it also follows, therefore, that the being absolutely infinite, or God, has from Himself an absolutely infinite power of existence, and that He therefore necessarily exists. . . . Whatever perfection or reality those things may have which are produced by external causes, whether they consist of many parts or of few, they owe it all to the virtue of an external cause, and, therefore, their existence springs from the perfection of an external cause alone and not from their own. On the other hand, whatever perfection substance has is due to no external cause. Therefore, its existence must follow from its nature alone, and is, therefore, nothing else than its essence. Perfection consequently does not prevent the existence of a thing, but establishes it ;¹ imperfection, on the other hand, prevents existence" (*Ethics*, I, Prop. XI, note).

Leibnitz likewise attempted to develop Descartes' argument, and to make it complete by remedying a flaw which he thought he discovered in it.²

"I was led," he says, "to examine this question more closely by an argument which was for a long time well known in the schools, and which has been once more employed by Descartes to prove the existence of God. The argument runs thus : Everything which follows from the idea or the definition of a thing may be affirmed of that thing. Existence follows from the idea of God, or of the most perfect being that can be conceived. Therefore, existence may be affirmed of God. But

¹Bossuet coincides with Spinoza when he says (*1^{re} Élévation*) : "Is perfection an obstacle to being ? On the contrary, it is the reason of being."

²Leibnitz appears not to have known that the difficulty he mentions in the *a priori* proof had already been noticed in the second of the *Objections*, and that Descartes had given the same reply as himself, but with more profound reasoning.

the truth is, the only inference we can draw is the following: If God is possible, it follows that He exists. For we can find in our definitions no solid foundation for our inference until we know that these definitions are real and imply no contradiction. Thus it is not enough for us to have the thought of God in order to be sure that we have the idea of Him, and in the demonstration we have just set forth the possibility of this very perfect being must be proved or assumed if we are to infer legitimately" (*Méditations sur les idées*; see Janet's edition, p. 516).

Thus in Descartes' argument it is assumed that God is possible, and there is a suppressed premiss, according to which God is possible, and the idea of Him does not imply contradiction. "I grant," says Leibnitz, "that the demonstration is imperfect, because it assumes that the perfect being is possible in Himself. If anyone could prove this, we would then have a truly mathematical proof of the existence of God." He gives a proof of this himself by the way, implicitly and without reasoning it out clearly.

"And," he says, "as nothing can interfere with the possibility of that which involves no limits, no negation, and consequently no contradiction, this [*i.e.* this possibility] is sufficient of itself to make known the existence of God *a priori*" (*Monad.* 45). But Leibnitz does not sufficiently explain how it is that what does not contain negation does not imply contradiction; for, to take his own example, the idea of most rapid motion does not appear to contain a negation, and yet it is contradictory. In addition to this correction of Descartes' proof, Leibnitz introduced a proof of his own, which is in fact the same as that known as the proof *a contingentia mundi*, or, to use Kant's expression, the *cosmological argument*. Leibnitz, however, derives this proof from a principle which is peculiar to himself, the principle, namely, of Sufficient Reason:

"And as all this detail [of contingent things] again involves other prior or more detailed contingent things, each of which still needs a similar analysis to yield its reason, we are no further forward; and the sufficient or final reason must be outside the sequence or series of particular contingent things, however infinite this series may be. Thus the final reason of things must be in a necessary substance, in which the variety of particular changes exist only eminently, as in its source, and this substance we call God" (*Monad.* §§ 37 and 38).

Malebranche does not give any special proof of the existence of God, for he teaches that all things are seen in God, and that God is seen in Himself, and he thinks that we have no other idea of God besides this vision. To think God and to see Him are one and the same thing, and consequently there is no need to pass by means of reasoning from the idea of God to His being, since the soul is immediately united to His being itself.

"By Divinity, says he, we understand the Infinite, the being that is without restriction, the infinitely perfect being. Now, nothing finite can represent the Infinite. Therefore, it is enough to think of God in order to know that He is.—*Ariste*. Yes, Theotimus, I am convinced that nothing can have sufficient reality to represent the Infinite. But I am certain that I see the Infinite; therefore, the Infinite exists since I see it and can only see it in itself."

The arguments of Bossuet must be included in this account of the proofs of the existence of God. In the first place (see note on p. 298), he expresses in a forcible and profound manner the *a priori* proof, saying, with Spinoza, that perfection is not an obstacle to being; on the contrary, it is the reason of being. He also re-introduces, under a new and characteristic form, the Platonic ideal argument; i.e. he proves the existence of God through the existence of *eternal truths*. There are laws which are necessary and eternal, and these laws would not cease to be true even if none of the things subject to them had existence. For example, even if there were no triangles in reality, it would still remain true that in all triangles the three angles are equal to two right angles. On the other hand again, it is not necessary that the human understanding should exist to know these truths, for they would still be true if there was not a man in the world. Thus, we have here eternal truths, which depend neither on the world nor on the human mind. Nevertheless these truths must exist somewhere and depend on some being.

"If now I seek to discover in what subject these truths reside, eternal and immutable as they are, I am obliged to admit the existence of a being in whom truth eternally subsists and by whom it is for ever comprehended; and this being must be truth itself, and must be all truth, and it is from Him that the truth is derived in all that is and is comprehended outside of Him" (*Connaissance de Dieu et de soi-même*, Ch. IV).

In order to complete this history of the proofs of the existence of God which were advanced in the 17th century, we might further cite Newton's proof which is founded on the existence of space, and that of Clarke, who attempted to unite in one single demonstration all the separate proofs that, taken individually, only prove a single attribute of God, and are consequently insufficient, being in reality only parts of one and the same demonstration. But our space is limited, and we must pass on to the 18th century.

The 18th century has the reputation of being the century of atheism, on account of the noise made in the world by the philosophy of the *Encyclopaedia*, the philosophy, that is, of Holbach and of Diderot; but it would be more true to say that it was the century of deism, for at no other period was a larger number of books written on the subject of the existence of God. In this century there arose a new science which had not been known before, and was chiefly due to the progress made at this time in physical and natural knowledge: the science, that is, of physical theology which derives proofs of the existence of God from the wonders of nature.

Kant's Criticism: The Ontological Argument; The Cosmological Argument; The Physico-Theological Argument; The Three reduced to One; Kant's Proof by Morality.

A more important stage in the history of the proofs of the existence of God is marked by Kant's criticism in the *Critique of Pure Reason*. The third part of the *Transcendental Dialectic* is devoted to the theory and discussion of these proofs.

Kant begins by examining the definition of God as laid down by the Cartesians, and in particular by Leibnitz. God is the most real of all beings (*ens realissimum, omnitudo realitatis*), the whole of reality. This whole of reality contains within itself all possible attributes of things, all that can be known as real and excludes all negation.

Now a negation cannot be cogitated as determined without cogitating at the same time the opposite affirmation. The man born blind has not the least notion of darkness, because he has none of light; the vagabond knows nothing of poverty, because he has never known what it is to be in comfort; the ignorant man has no conception of his ignorance, because he has no conception of knowledge. All conceptions of negatives are

accordingly derived or deduced conceptions ; and realities contain the data, and, so to speak, the material or transcendental contents of the possibility and complete determination of all things. . . . We shall find ourselves authorized to determine our notion of the Supreme Being by means of the right conception of a highest reality, as one, simple, all-sufficient, eternal, and so on—in one word, to determine it in its unconditioned completeness by the aid of every possible predicate. The conception of such a being is the conception of God in its transcendental sense, and thus the ideal of pure reason is the object-matter of a transcendental theology” (*Critique of Pure Reason*, English trans., pp. 354, 359).

That this concept does exist in the human mind and that it there plays an important part are facts which Kant never for an instant doubts. But what remains doubtful is whether this concept corresponds to a positive reality, to an existence ; for it is possible for us to have an idea that corresponds to no object. To prove the objective reality of this concept is what we are concerned with in the demonstrations of the existence of God ; and the examination of these demonstrations is the object of Kant's criticism.

Kant reduces the possible proofs of the existence of God to three : Either, he says, we start from determinate experience and from the peculiar constitution of the sensible world (for example, from the order and harmony of this world), and from this order infer a cause—this is what is known as the proof by final causes, which Kant calls the *physico-theological* proof ; or, we begin from a purely indeterminate experience, or from any existence (considered as contingent and not self-sufficient) in the sensible world—this is the proof *a contingentia mundi* or *cosmological* proof ; or, we abstract from all experience, and reason *a priori* from the concept to existence—this is St. Anselm's argument, and is called by Kant the *ontological* proof.

Such are the only three possible ways of proving the existence of God, and Kant subjects them successively to his criticism, commencing with the ontological argument, to which he reduces the other two.

This argument, as we know, is based on the definition of God : God is the perfect being (a definition which Kant accepts), and from this definition existence is inferred. For, says Descartes, God, who possesses every perfection, must possess existence, which is a perfection ; therefore God exists.

1. *Invalidity of the ontological proof.*—To this reasoning Kant makes the following objections: In an analytic proposition, if I suppress the predicate (or attribute) and retain the subject, or suppress the subject and retain the attribute, the result would no doubt be a contradiction. But if I suppress at once both subject and attribute, there is no longer any contradiction. Consequently, if, in the proposition, God exists, I suppress the attribute (that is, existence), I at the same time suppress the subject. Where is then the contradiction? Again, existence is not a real attribute, that is to say, it is not a thing which can be added to the concept of a thing, but simply the position of the thing. Otherwise there would be one attribute more in the being that exists than in the being that is thought, which is impossible, for in that case thought would not be adequate. A hundred real crowns has no more content than a hundred crowns in the mind. Lastly, the proposition, "God exists," is either an analytic or a synthetic proposition. If the former, the attribute adds nothing to the subject; and, consequently, the existence of the thing adds nothing to the thought of the thing. Therefore, the thing is already assumed as existing and real, and we have only a tautology: so that the argument is useless. If, on the other hand, the proposition is a synthetic one, how can it be maintained that the attribute cannot be suppressed without contradiction, since this is only true of analytic propositions?

2. *Invalidity of the cosmological proof.*—This proof, instead of reasoning from the supreme reality to existence, infers, from the existence of any being, the supreme reality. It consists in saying: if anything exists there must exist a being which is absolutely necessary; now I exist, therefore, etc. But this proof goes further, for from this absolutely necessary existence, it infers a being supremely real (*ens realissimum*), that is to say, in the language of Descartes and Leibnitz, a perfect being. It is the second part of the argument which, strictly speaking, constitutes a proof of the existence of God, for a being which would only be necessary without being perfect might as well be matter or the world. It is, therefore, assumed that only a being which is supremely real, that is to say, perfect, can correspond to the concept of necessary existence, and is contained in it. But this is precisely what the

ontological argument affirms; therefore, this second argument presupposes the first.

Besides this fundamental defect in the cosmological argument, Kant finds the following flaws: (1) the inference from a contingent thing to a cause is only valid in the sensible world, and has no significance outside it; (2) the impossibility of an infinite series has not been proved; (3) it is believed that the idea of necessity excludes any conditional element, whereas, on the contrary, every necessity presupposes a condition; (4) a logical possibility (the "supremely real being which has nothing impossible in itself, but which has only a logical possibility) is confounded with a real possibility which has meaning in experience only.

3 *Invalidity of the physico-theological proof*.—The title given by Kant to his discussion of this proof is inaccurate, for in this third discussion he claims to prove, not the impossibility, but the insufficiency of the proof by final causes. This proof is incomplete, but not null, and in this it differs from the two others. It consists of the following four points: 1st, there are in the world manifest signs of design; 2nd, the order in things is contingent, that is to say, it is not derived from the nature of things themselves; 3rd, there exists, therefore, either one or several intelligent causes which have produced this harmony, 4th, the unity of this cause is inferred from the interdependence of all the things that go to make up the world.

This proof gives rise to the following objections: 1st, it proves that the *form* of the world is contingent, but not its *matter*. It would lead us, therefore, to infer, at most, an *architect* of the world, but not a *creator*; 2nd, from the indications of design found in the world we can only reason to a cause that is proportionate to the number and value of these indications. This proof would lead us, therefore, to infer a cause that was *most* wise, but not to an absolutely *wise* cause, since our experience makes known to us nothing absolute, and since, moreover, besides these signs of wisdom, experience shows us irregularities and imperfections which we are unable to explain. If, therefore, we conceive this cause as perfect and infinite, it is because we implicitly assume that necessary existence involves perfection; but in so doing we once more assume the truth of the ontological argument.

In lieu of these speculative proofs of the existence of God, which, together with all metaphysical theories, Kant regards as chimerical, he proposes the only proof that appears to him conclusive; this is what he calls the *practical* or *moral proof*. Briefly, this proof runs thus: The notion of morality is inseparably joined to that of happiness. For the moral law may be stated as follows: Act so as to be deserving of happiness. But, though it depends upon ourselves to perform actions which will make us deserving of happiness, that this consequence should follow does not depend upon us; for happiness depends on external things, and on the will of other men. And yet, if the moral law is not a chimera the sovereign good must be possible; in other words, the harmony between virtue and happiness must be realized. For this there is needed a will higher than nature, and higher than man; and this cause is God, for only a Supreme and Infinite Being is capable of establishing this coincidence. We must add that at times Kant himself leads us to understand that this proof, which he prefers to the others, represents nevertheless no more than a point of view of the human mind, an ideal satisfaction of our craving for justice; in a word, it is an argument which rests upon faith rather than demonstration.

Hegel:—Defence of the Ontological Argument.

Since Kant's masterly and profound disquisition, nothing of importance has been contributed to this subject, if we except indeed the criticism of Kant's criticism made by Hegel. Hegel admits that it is not possible to pass from the sensible world to God by means of any argument. Experience, indeed, affords no solid ground from which we might rise to the Absolute. But, all the same, the cosmological argument is not void. The mistake was to give it the form of a syllogism, whereas, in reality this proof is nothing else than the expression of thought itself, which cannot be satisfied by the finite and is absolutely unable to do without the idea of the infinite. Here are Hegel's own words:

"Man is a being that thinks, and, therefore, sound common sense, as well as philosophy, will not yield up their will of rising to God from and out of the empirical view of the world. The only basis on which this rise is possible lies in the study of the world, which is made by thought, as

distinguished from the senses and the animal nature. Thought and thought alone can compass the essence, substance, universal power, and ultimate design of the world. And what men call the proofs of God's existence are seen to be ways of describing and analysing the inward movement of the mind, which is the great thinker that thinks the data of the senses. The rise of thought beyond the world of sense, its passage from the finite to the infinite, the leap into the super-sensible which it takes when it snaps asunder the links of the chain of sense, all this transition is thought and nothing but thought. Say there must be no such passage, and you say there is to be no thinking; and in sooth animals make no such transitions. They never get further than sensation and the perception of the senses, and in consequence they have no religion.

"And it is because they do not, with sufficient prominence, express the negative features implied in the exaltation of the mind from the world to God, that the metaphysical proofs of the being of God are defective interpretations and descriptions of the process. That upward spring of the mind signifies that the being which the world has is only a semblance, no real being, no absolute truth; it signifies that beyond and above that apparent being, truth abides in God, so that true being is another name for God. The process of exaltation might thus appear to be transition, and to involve a mean, but it is no less equally true that every trace of transition and means is absorbed, since the world, which might have seemed to be the means of reaching God, is explained to be a nonentity". (*Logic*, Wallace's trans. pp. 87, 88).

Besides thus vindicating the proofs of the existence of God in general, Hegel also attacks with much force Kant's reasoning against the ontological proof, and adopts, from his own point of view, the *a priori* argument.

"The unexampled favour and acceptance which attended Kant's criticism of the ontological proof was undoubtedly due to the illustration which he made use of. To mark the difference between thought and being he took the instance of an hundred sovereigns, which, for anything it matters to the notion, are the same hundred, whether they are real or only possible, though the difference of the two cases is very perceptible in their effect on a man's purse. Nothing can be more obvious than that anything we only think or fancy is not on that account actual, and everybody is aware that a conception and even a notion is no match for being. Still it may not unfairly be styled a barbarism in language when the name of notion is given to things like a hundred sovereigns. . . . Above all, it is well to remember when we speak of God that we have an object of another kind than any hundred sovereigns, and unlike any particular notion, conceit, or whatever else it may be styled. The very nature of everything finite is expressed by saying that its

being in time and space is discrepant from its notion. God, on the contrary, ought to be what can only be 'thought as existing.' His notion involves Being. It is this unity of the notion and being that constitutes the notion of God. . . . Besides, the paltry strictures which separate being from thought, can at best disturb the process of the mind from the thought of God to the certainty that He is; it cannot take it away. It is this process of transition, depending on the absolute inseparability of the thought of God from His Being, for which its proper authority has been vindicated in the theory of faith or immediate knowledge" (*Ibid.*, p. 91).

We have nothing further to add to our account of the development of this problem, in which Hegel's view appears to us to mark the culminating point, and the true philosophic method. We need merely mention that the French spiritualistic school wholly adopted Hegel's theory on this subject, and that it has always maintained that the different proofs of the existence of God, as given in the logical and scholastic form, are only the external side, the formal exposition of the immediate movement by which we reason from the finite to the infinite, think the infinite in the finite, and by which God is made the centre and the foundation of thought.

"All knowledge of truth," says Cousin, "is knowledge of God, and the direct perception of truth implies an indirect and obscure perception of God. . . . Knowledge is by nature divine. . . . Religion is essential to reason. . . . As there is being in all thought, all thought is religious. . . . Every thought, every word, is an act of faith, a religion in itself" (Cousin, *Premiers Fragments*, p. 291).

2. THEORIES CONCERNING THE NATURE OF GOD.

Descartes' Theodicy; God Cause of Himself; God Creator of the Eternal Truths; Theory of Continuous Creation; The Divine Veracity.

We now pass from the question of the existence of God to that of His nature; and we shall begin as always when dealing with modern philosophy, by examining the theodicy of Descartes. The fundamental principle of this theodicy is that God is cause of Himself (*causa sui*), which is already understood in the statement that He is the self-existent Being. Descartes certainly appears to have used these expressions

literally, for he says: "From the very fact that I am imperfect, it follows, in the first place, that I do not owe my existence to myself; for if I had given myself being I should *a fortiori* have given myself every perfection," an argument, says Arnauld, which appears to imply that a thing may give itself being before it exists. It was objected to Descartes that this expression, "self-existent being," which is always applied to God, can only be understood negatively, and simply signifies that a thing does not exist through any other being; and that it cannot be understood in a positive and affirmative way, that is to say, as if owing existence to itself as cause.

But Descartes replied that, on the contrary, the expression was to be taken in a positive and not in a negative sense; otherwise God would be without a cause, without any *ratio essendi*. If a thing could exist without a cause, what would become of the axiom of causality, without which it is impossible to prove the existence of God? This axiom should be stated thus: Everything has a cause; therefore, God Himself must have a cause, and that cause is His own essence. No doubt God is not, strictly speaking, His own efficient cause, but in Him the formal cause or essence plays the part of the efficient cause and is analogous to the efficient cause, just as the polygon is analogous to the circle. In God His essence is the cause of His existence. It is because He is supremely perfect that He exists, and it is in this sense that He is His own cause. Thus, as we see, this theory finally takes us back to the ontological proof; for it is because in God existence is conditioned by His essence, that His essence can be employed to prove His existence (see the whole of the discussion with Arnauld, Cousin's ed. Vol. II, p. 60, *et seq.*).

This theory of a God who is the Cause of Himself attributes the greatest possible power to what is divine (*Rép. 5^{me} Obj.* pp. 448-455). Thus we find Descartes exalts the omnipotence of God, and teaches not only, as is taught in every form of Christianity, that He created the world, but also that He created the eternal truths. Descartes says that God would still be subject to some other power, as Jupiter was to the Styx, if there existed outside and above Him any class of truths which He had not created; he, therefore, does not hesitate to state that, if the three angles of a triangle are equal to two right angles,

and if there are no mountains without valleys, it is because God has willed it so—a doctrine which would appear to violate the principle of contradiction, if it were not possible to take it in another sense, and say with Descartes himself, that “God creates not only existences, but also essences”; for this implies that, with these essences, He created the truths and relations that result from them. Thus, God created space, and in space the triangle, and in the triangle the geometrical laws which arise out of its essence, as, for example, the equality of its three angles to two right angles. God creates the father and the son, and with them the moral relations which spring from their respective essences.

For the rest, Descartes makes his doctrine appear much more plausible than at first sight, by saying that, in God, will and intelligence are one—a doctrine which is after all not so opposed to the common one, since Thomas Aquinas himself taught that in God all attributes together are one, because He is pure actuality. According to the doctrine of the unity of will and intelligence, it would not be by will alone, by God’s free choice, that truth was created, but by a will that is identical with intelligence, that is to say, something quite other than what we ordinarily call will.

Another consequence of the Cartesian theory of divine omnipotence is the doctrine of a continuous creation. This doctrine was not peculiar to Descartes, for it really belonged to the scholastics, as he himself mentions. Descartes teaches that of itself the creation would not only not have begun to exist, but that it could not even continue to so exist; for, he says, the moments of time are independent of one another; therefore, at each moment of a being’s existence the cause which gave it this existence must continue to give it every instant. Conservation is nothing else than creation; and Descartes, as we have seen, made use of this principle in order to prove the existence of God, without, as he said, having to face the difficulty of a *processus in infinitum*; for the question is not so much who created me formerly, as, to whom do I owe my present conservation, and since I am an actual thing, there must be an actual cause which maintains my existence.

Those adversaries of Descartes who considered his physics only, without regard to his metaphysics, accused him of atheism,

because he endeavoured to explain the universe through the laws of motion alone. "Descartes," says Pascal, "would willingly have done without God, but he made God give a fillip to the world, and after that, had no further use for Him." But the folly of this reproach appears when we consider that if God created the laws of logic, if each act by which the world is preserved is a moment of the act of creation in general, the world in its logical and mechanical development is just as much the work of God as if He manifested His existence by acts that were purely arbitrary.

Leibnitz, it is true, reproached Descartes with having done away with final causes under the pretext that we cannot know the Creator's intentions; but Descartes, while he upholds no final cause in particular, still, in a general way, proves the existence of design in all things "by relying on no other principle than that of the infinite perfections" (*Discourse on Method*, V), and by deducing from the divine immutability, which is a consequence of the divine perfection, that fundamental law of nature, the conservation of the quantity of motion: a law which, though it has been to a certain extent modified in later times as regards the terms of its expression, has remained none the less the basis of science. This discovery of a certain immutable quantity in nature, whatever the formula of this quantity,¹ is one of Descartes' great achievements. And, far from excluding God from the world, this law, according to him, is a certain proof of the divine presence.

Further, Descartes makes his theodicy complete by the doctrine of the divine veracity (*Medit.* IV). This principle, which is also derived from the idea of perfection, serves as ultimate basis to the certitude which was already founded on the criterion of self-evidence. The divine veracity is logically deducible from the conception of a Perfect Being, for it is impossible that such a Being could deceive us.

It is true that it might be questioned whether the theory of an omnipotence that is above truth itself, is not somewhat prejudicial to the foregoing conclusion; for if God creates truth, why should He not create a truth that was relative to us, but

¹ Descartes called it *quantity of motion*; Leibnitz the *quantity of vital force*. Now we say the conservation of *energy* (see Poincaré, appendices Em. Boutroux's ed. of the *Monadology*).

at the same time not the real truth? And might it not be that our mind, by its own constitution, conceives veracity as a perfection, whilst indifference to truth was the characteristic of a higher nature? However this may be, and Descartes does not go into the question, it is, as we know, upon the divine veracity that he founds the existence of bodies, for, he says, we have an invincible inclination to believe in this existence. Now, this inclination has been given to us by God; He would, therefore, be deceiving us if there were in reality no bodies.

Finally, God is the basis of certainty; not that Descartes expressly says that the criterion of self-evidence is insufficient; but, as we cannot always go through the same reasoning, we are obliged to refer to our memory in order to be sure that we have formerly taken such or such a thing to be self-evident; and it is the divine veracity that is our warrant of the truthfulness of our faculties, and consequently of our memory. Lastly, as has been said, if self-evidence suffices as a logical test of certainty, the divine veracity serves to confirm this certainty ontologically.

To sum up: God, the cause of Himself;—His essence the cause of His existence;—continuous creation;—God as the creator of eternal truths;—the divine immutability as the foundation of physics;—divine veracity: these are the essential points in the theodicy of Descartes. We shall now proceed to examine that of Malebranche.

Malebranche: The Immediate Vision of God; Vision in God; Theory of Occasional Causes; Optimism; Simplicity of Ways or Methods; The Infinite Motive of Creation.

Malebranche, as we have already seen, simplified Descartes' proof of the existence of God by his doctrine of the idea of the Infinite. Instead of, like Descartes, reasoning from the idea to its object as from an effect to its cause, he holds that the idea of the Infinite and God are one and the same thing.

God is known not through an idea, but He is it in Himself; "if He is thought, He is." But what are we to understand by this term God? For Malebranche, as for Descartes, God is the infinitely perfect Being, but Malebranche insists more than Descartes on God's character as Being. It appears to him superfluous to add the idea of perfection to that of being. For him God is "the universal Being, the Being of Beings." "In order to

know what being is we must always remove from the idea of being, the notion of such and such beings" (*Entr. Métaph.* 2 and 8). He is neither body nor spirit; spirit is not to be attributed in the same sense to God and man. "God is Being without restriction" (21). "The Infinite simply" (12, 17). "The indeterminate being" (23), that is to say, "being that is in no sense limited." Malebranche tells us further that God is incomprehensible. "When I speak to you of God," he says, "if you understand what I say, it must be that I speak wrongly."

Having decided this, the next question is; while God is our immediate object when we address Him, do we see God in His substance or in His effects and by participation? Malebranche replies;

"I do not deny that the substance of God is seen in itself. We see it in itself in this sense, that we do not see it through something finite that represents it; but not in the sense that we reach it in its simplicity, and that we discover in it His perfections (P. 22). You do not discover that property, which is essential to the Infinite, of being at the same time one and all things, and so simple that, in Him each perfection contains all the others without any real distinction" (P. 21).

However imperfect this vision of God may be, yet He is the only being we perceive in itself. All other beings (at least all bodies) we only perceive in God—such is the celebrated theory known as *Vision in God*. Furthermore, beings are not only not known in themselves, but are also, of themselves, incapable of action. They are merely the occasions which determine God to act. This is the theory of *occasional causes* which forms the second part of Malebranche's system. God, since He is the sole being, is also alone intelligible and the only agent.

In the first place, what is the meaning of this strange expression, "*We see all things in God*"?

We have to distinguish two kinds of beings—the soul and the body. Properly speaking, we do not know the soul, we have no idea, but only a confused consciousness of it, and so Malebranche does not say that we see souls in God, but reserves this expression for bodies. And why is this? Because bodies alone can be the object of rational cognition. They alone can be known in their essence. Only in the case

of bodies are we able to deduce their properties from their essence, which is extension. The science of bodies is geometry ; but there is no geometry of souls, of these we only have an empirical knowledge. This is what Malebranche means when he says that the soul is not known to us in its idea, whereas bodies are known to us in their ideas, that is to say, in their essence.

But what is this essence ? It is a part of the substance of God which represents to us the bodies created by Him (whether these bodies exist really or not). God creates beings by participation in His substance. There is therefore in Him something which is an *a priori* representation of these beings, and it is this representation itself that we see when we think we see bodies. To know bodies is thus to know God as representative of bodies. This doctrine becomes still clearer if we assume in God an intelligible extension which differs from corporeal and sensible extension, being pure and immutable, the ideal of extension rather than a concrete and definite extension. Thence it follows that vision in God is but the vision of the divine extension in which we draw geometrical figures which are the essential elements in bodies.

Malebranche further explains that we see in the same manner not only bodies, but the universal and necessary truths, that is to say, mathematical and moral truths. Both are ratios, but the former are *ratios of quantity* and the latter *ratios of perfection* (see *The Ethical Problem*, Chap. I). Whenever we contemplate these two kind of ratios, God reveals and communicates to us His substance.

As God is the sole intelligible being, so is He also the sole agent, the sole cause ; in other words, finite beings are merely passive, and in them only phenomena occur ; but these phenomena are for God an occasion of action. For example, the movements of our body are for God the occasion on which He creates sensations in our souls, while the desires of the soul are an occasion for Him to create movements in the body. But why is this the case ? Because the action of cause implies a necessary relation with its effect, and we never find anything of the kind either in our internal or external experience.

Thus Malebranche had, before Hume, perceived the difficulty involved in the problem of causality. We see, he said, like

Hume, only successions of phenomena, and not the inner connection by which two terms are joined. Why does this connection escape our perception? Because it is something divine, something to which there is nothing analogous in creatures (*Méd. Chrét.* IX, 2).

"If we come to consider our notion of cause or of the power of action, we cannot doubt that this idea represents something divine" (*Rech. de la Vér.* VI, iii). "To assume efficiency in creatures is to divinize them, for all efficiency is something divine and infinite" (*Méd. Chrét.* IX, 7). "It is a contradiction to say all the angels and devils together could move a bit of straw" (*Entr. Métaphys.* VII, 10).

In these two theories (Vision in God and Occasional Causes), Malebranche's theology may be summed up. We must further mention three characteristic doctrines of his: (1) his optimism; (2) the principle of the simplicity of means; (3) the infinite motive of creation.

As regards Malebranche's doctrine of optimism a passage from Fénelon supplies us with a summary of it:

"The following are the principal conceptions which go to make up his system: 1st, God, as an infinitely perfect being, can accomplish nothing that does not bear the mark of His infinite perfection; so among all the works He might perform, His wisdom always determines Him to choose the most perfect. It is true that He is free to act or not act outside Himself, but supposing He does act He must produce whatever is most perfect, being thereto invincibly determined by the order of things. It were unworthy of Him not to conform to this order" (*Réfutation du système de Malebranche*, Ch. 1).

This is a correct account of Malebranche's *optimism*, which is identical with that of Leibnitz. To this general principle Malebranche adds two others which are peculiar to himself: 1st, the principle of the *simplicity of ways* or of *general volitions*; 2nd, the *necessity of Incarnation* in order that the universe may be worthy of God.

"The first," continues Fénelon, "consists in that God produced the most perfect work by the simplest means. He might have added many apparent beauties to His works, but He could not do so without derogating from this simplicity of method. But what is this simplicity of ways or of method? God, knowing all the different ways of doing His work, will choose the one that will cost Him the smallest number of particular volitions, the way in which He sees that general volitions would be most fruitful. He

might by a particular volition have prevented the rain from falling uselessly on the sea, but it is more perfect in God to spare Himself particular volitions than to add this perfection to His work."

Here is the third principle:

"But in order that the work of God might have the mark of infinite perfection, the author (i.e. Malebranche) adds to the principle of the simplicity of means a second principle, which is, that the world would be a work unworthy of God if Jesus Christ had not formed part of the plan of creation. God could only create the world in view of the incarnation of the Word. Even if man had never sinned, the birth of Jesus Christ would have been an absolute necessity."

Thus the infinite motive of creation was the birth and incarnation of Jesus Christ. In this way Malebranche's metaphysics merges into theology.

As we see, God in Malebranche's system, is all. He is the sole light and the sole cause. He is all that is real and intelligible in things, and He, as the Word incarnate, is further a member and a part of the world. Were it not for the Christian piety by which it is inspired, this theory would scarcely be distinguishable from that of Spinoza.

Theology of Spinoza: Unity of Substance; The Attributes of God; Thought and Extension; Divine Freedom and Universal Necessity.

Spinoza's theodicy, if we may use the term, cannot easily be distinguished from his metaphysics. We shall, however, endeavour to limit our account by confining ourselves to his doctrine of the nature of God and by recalling what has been said in the preceding chapter concerning his proof of the existence of God.

Spinoza's theory of God may be brought under three heads: 1st, God is the only substance; 2nd, the only attributes we know of Him are extension and thought; 3rd, He evolves Himself necessarily according to the law of His essence.

It is generally believed that Spinoza's doctrine of the unity of substance is merely a necessary consequence of the definition borrowed from Descartes: "Substance is that which is in itself and is conceived through itself" (*Ethics* I, Def. 3). Hence it is said, "Since substance, by its definition, is being in itself, it follows evidently that there can only be one substance, for there

can only exist one being in itself and through itself." But that Spinoza's doctrine is not essentially connected with this definition is proved by the fact that in the book which gives his first sketch of the *Ethics*, that is, in the *De Deo et Homine*, Spinoza asserts the unity of substance without making use of the Cartesian definition. Even in the *Ethics* he does not employ this definition to prove the unity of substance, but proves it by the theorem that a substance cannot be produced (I, VI). "For," he says, "it could be produced only by a substance having different attributes or by a substance having attributes in common with it"; but he shows that both of these ways are alike impossible. Since a substance cannot be produced, it follows that every substance is uncreated, or, in other words, that every substance is self-existent.

This being the case, it only remains for him to prove, like all metaphysicians, that there can only be one being that exists of itself. There cannot be several uncreated substances, for the reason that there cannot be several infinities. In short, Spinoza's definition has not at all the meaning generally attributed to it; for he does not say that substance is being through itself, but only that it is a being in itself, which is a very different statement, since it expresses, not the antithesis between the contingent and the necessary, but the antithesis between mode and substance. Modes and attributes always exist in some other thing, and thus Spinoza calls them *inherentia*; and in scholastic language inherence is the law by which the mode or attribute is united to the substance. Substance, on the contrary, is not inherent in anything, does not exist in another thing, and since it does not exist in another thing it exists in itself, is in itself.¹ Similarly, it is known of itself, that is to say, it does not require any other thing in order to be known, unless it be in its origin; but as far as I know it as existing, I can think it without thinking any other thing. These are indeed the true characteristics of substance, and it is hard to see what other definition could be given of it.

¹ It will be noticed that in this definition Spinoza does not by any means say that substance exists *through itself*, but only that it exists *in itself*, and is known through itself, which is quite a different thing. It is by the previous argument that Spinoza proves that every substance exists *through itself*, and consequently that there can be only one substance.

But it remains to be known if such a being can exist and yet not be just the uncreated being, and this is Spinoza's proposition. This he proves by saying, that if such a substance were created, either it would have attributes in common with the creating substance, and in that case it would be identical with it, because substances only differ in their attributes; or it would possess different attributes, in which case one could not be the cause of the other, since there must always be something common in cause and effect. (The effect must involve the concept of the cause.)

Having proved God to be the only substance, and having, like Descartes, defined Him as the being whose essence involves existence, Spinoza now proceeds to the determination of His attributes. God possesses an infinite number of infinite attributes. Of these we only know two—extension and thought. Before he tells us what are the attributes possessed by God, Spinoza sets forth those which He does not possess. Indeed, it is only in the second part of the *Ethics* (*De Mente*) that Spinoza proves the existence of the two attributes in God which we do know, namely, extension and thought. But in the first Part (I, 31, 32, and Schol. of Prop. 17) he proves that God has neither understanding nor will. However, although the two attributes of God are not proved in the first part, they are implied in it. For Spinoza proves, (Schol. of Prop. 15), firstly that God can be extended without being divisible; secondly, that understanding and will, without being divine attributes are modes of the divine thought (Props. 31 and 32).

In order to prove the existence of thought in God, Spinoza lays down this axiom: man thinks (II, ax. 2). There are, therefore, individual thoughts, that is to say, modes which presuppose an attribute without which they cannot be conceived. But as all things are in God, since He is the only substance, it follows that these modes are in God and conceived by God, therefore the attribute whose concept they imply is an attribute of God. The same demonstration serves to prove the existence of divine extension (II, Props. 1 and 2).

Thus Spinoza attributes to God thought, but neither understanding nor will (I, Prop. 17, Schol.). The great difficulty is to see what the distinction is which Spinoza makes

between understanding and thought. This he does not tell us expressly; but either the term thought has no meaning, or it signifies knowledge pure and absolute; and in this case understanding must signify discursive and relative knowledge. Spinoza denies that understanding pertains to the nature of God, because there can be nothing common to human nature and the divine, and because the divine understanding would only have the same resemblance to human understanding as the dog, sign of the Zodiac, has to the dog, the barking animal.

But if this reasoning be accepted, the same would have to be said of thought; and how then would the divine thought be proved? Is it, as Spinoza said, merely by the fact that man thinks? How can divine thought be the cause of human thought, since the effect must involve the concept of the cause? We must then say that if understanding is not in God, it is because it is a finite mode of thought (discursive understanding); on the other hand it presupposes pure thought or what we ourselves would call intuitive understanding.

It is, indeed, quite evident that by thought Spinoza does not understand merely objective thought or the logical and rational laws of things, but also subjective thought, or the act of cognition. This follows from the proposition (II, 1, Schol.), where he says, "The more things a thinking being can think, the more reality or perfection we conceive it to possess, and, therefore, the being which can think an infinity of things in infinite ways is necessarily infinite by his power of thinking." Again, Spinoza says (II, Prop. 3, Schol.), "God understands Himself." And is it possible to understand without knowing? The divine thought is therefore the act of cognition in its pure and absolute essence.

We now proceed to the question of the divine essence, and it is here especially that we perceive the influence of Descartes on Spinoza. Descartes' philosophy is dominated by one fundamental doctrine, the dualism of thought and extension; Spinoza also holds this dualism. For him, as for Descartes, the only clear and distinct ideas we have are the ideas of thought and of extension; for him also these two ideas, though always in correspondence, are heterogeneous, and, like all Cartesians, he held that there could be no relation between them. Finally,

for Spinoza again the whole material world is explained by extension: but these two things, instead of being, as on the view of Descartes, two substances, are attributes of one and the same substance.

And now, how is the principle of the unity or indivisibility of substance (I, Prop. 13) to be reconciled with the doctrine of the divine extension? In order to solve this difficulty, Spinoza draws a distinction between quantity as it exists in the imagination and senses, and quantity as it exists in the understanding (*Ibid.* Prop. 15, Schol.). It is only the surface of things, or body, that is divided and divisible; the real substratum or substance is indivisible; for in substance, or in the extended in itself, there is no separation of parts. All the arguments brought against the divine extension spring from regarding extension as composed of finite parts, but those who thus make up the infinite out of the finite fall into inextricable contradictions. Again, the divine perfection is adduced as an objection to this doctrine; but the extended in itself, being indivisible, in no way diminishes the perfection of God; and, moreover, as He alone exists, and as nothing exists outside Him, He is not capable of suffering or receiving any modification from without.

In connection with his theory of the divine nature, we find in Spinoza another theory which is obscure but important—that of the eternal and infinite modes. Spinoza holds the existence, between the attribute and the mode proper, of intermediate states, which are not attributes but modes, although not finite modes like modes properly so called. "They were," says Emile Saisset, "emanations, as it were, which served to fill the chasm and form the transition between the *natura naturans* and the *natura naturata*, that is to say, between God and the world." The existence of these modes is proved by the argument (I, 21) that what is immediately derived from the absolute nature of a divine attribute must participate in the absolute nature of this attribute; it must, in some manner, express this absolute nature, and to do this must itself be infinite and eternal (see Part III, Ch. VII, *Mind*).

Of these eternal and infinite modes, Spinoza in the *Ethics* only names one—the idea of God. God thinks, says Spinoza, and the more perfect a being is the more numerous are the objects he thinks. God, being infinite, thinks an infinity of

infinitely modified beings. Now an infinity of infinitely modified beings is God Himself. Therefore God thinks God; therefore He has the idea of God (II, 3). Hence it follows, in Spinoza's doctrine, that God has the idea of Himself, that He thinks, understands Himself. But what is a being's thought of himself if not self-consciousness. And if consciousness be attributed to God must not we also attribute to Him personality, at least in a certain degree?

Can one call a God who thinks God, impersonal? It is true that Spinoza places the idea of God, not in the *natura naturans* or divine substance itself, but like all modes, in the *natura naturata* (I, Prop. 29, Scholium, and Prop. 31). But this is a purely abstract distinction notwithstanding which Spinoza certainly admits a divine consciousness. It would, however, be to strain Spinoza's meaning, and to give to his doctrine of God an Alexandrian and agnostic sense scarcely in harmony with his system if we regarded his idea of God as a kind of hypostasis or fall from God, a thought which would contemplate God from without, or, from below, without itself being God; for there is nothing in his writings to warrant such an interpretation. Nor would it be more rational to suppose that, as with Hegel, the idea of God had existence only in human thought. This doctrine would be even more inconsistent with the spirit of Spinoza's philosophy, for it would lead to the supposition that the more perfect is posterior to the less perfect, which is utterly opposed to Spinoza's principles. The only remaining view is, then, that on Spinoza's doctrine God is conscious of Himself, that this consciousness follows from the absolute nature of thought, and hence that it is God.

There remains to be considered Spinoza's doctrine of the necessary evolution of God and of the divine freedom.

Spinoza lays it down as a principle that God is a *free cause*, and that He is, moreover, the *only free cause* (I, Prop. 17, Coroll.). "God acts from the laws of His own nature only, and is compelled by no one," and, indeed, since nothing can either be or be conceived without God (*Ibid.* Prop. 15), it follows that He can be determined by nothing except Himself. Therefore He is free; and He is, moreover, the *only free cause*, since He is the only being that is determined by itself.

